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PART-I

Notifications, Orders and Declarations by Haryana Government

HARYANA GOVERNMENT

LABOUR DEPARTMENT

Notification

The 4th May, 2026

The Haryana Occupational Safety, health and Working Condition Rules, 2026

No. 2/27/2026-2 LAB.— Whereas, the draft of the Haryana Occupational Safety, Health and Working Condition Rules, 2021 was published in Haryana Govt. Gazette (Extra) Sep, 17, 2021 (BIHDR. 26, 1943 SAKA vide notification No. 02/11/2021-2Lab dated 17.09.2021 inviting objection and suggestions from person likely to be effected thereby:

And whereas, it is decided by the State Government to publish revised following draft rules for information of all persons likely to be affected thereby:

Now, therefore, the following draft of the Haryana Occupational Safety, Health and Working condition Rules, 2026, which the State Government proposed to make in exercise of the power conferred by section 133 and 135 of the Occupational Safety, Health and Working condition Code, 2020 (Central Act No. 37 of 2020) are hereby published, as required sub section (1) of said sections for information of all persons likely to be affected thereby and the notice is hereby given that the said draft rules will be taken into consideration after the expiry of a period of forty five days from the date of the publication of this notification in the official Gazette.

Any objection and suggestion, if any, may be address to the Labour Commissioner-cum-Chief Inspector of Factories, Haryana 30 Bays Building, Sector, 17 B, Chandigarh or by email at haryanaoshrules@gmail.com The objections and suggestions, which may be received from any person with respect to the said draft before expiry of the period specified above, will be considered by the State Government. The objections and suggestions should be sent in a performa containing columns (i) specifying the name and address of the person/organization, column (ii) specifying the rule or sub-rule which is proposed to be modified and column (iii) specifying the revised rule or sub-rule proposed to be substituted and reason thereof.

DRAFT RULES
CHAPTER-1
PRELIMINARY

1) Short title, extent and commencement:

(1) These rules may be cited as the Haryana Occupational Safety, Health and Working Conditions Rules, 2026.

(2) These rules shall extend to whole of the State of Haryana.

(3) These rules shall come into force from the date of their publication in the Official Gazette after the date of commencement of Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020).

2) Definitions

(a) In these Rules unless there is anything repugnant in the subject or context:-

(i) "Appendix" means an appendix appended to these Rules.

(ii) "Code" means The Occupational Safety, Health and Working Conditions Code, 2020 (37 of 2020)

(iii) "Continuous Process" means the materials either dried bulk or fluids that are being processed are continuously in motion ,undergoing chemical reaction are subject to mechanical or heat treatment or any other process specified by State Government.

(b) "Designated Authority" means an officer notified by government for the purpose of the Code.

(c) "First employment" means first employment in the said processes and also reemployment in such processes following any cessation of employment for a continuous period exceeding three calendar months.

(d) "Form" means form appended to these rules.

(e) “Hazardous substance” means any substance being manufactured or stored or handled or used in any hazardous process and in such quantity as specified by the State Government by notification from time to time.

(f) "Portal" means website of Labour department of Government of Haryana for delivering services.

(g) "Recognized University or Institution" means,

(a) any university, incorporated by law, by central or any state government;

(b) any other university or institution which is declared by the Government to be a recognized university, deemed university or institution for the purposes of these rules.

(h) "Quarter" means period of three consecutive months beginning on 1st of January, 1st of April, 1st of July and 1st of October of the year.

(i) "Registering Officer means an officer appointed under the Code and the rules made thereunder.

(j) "Schedule" means the schedule of the Code and the rules made thereunder.

(k) "Section" means section of the Code.

(l) "Year" means period of twelve months beginning from 1st January.

The words and expressions used in these rules which are not defined therein, but are defined in the Code, shall have their respective meaning as assigned to them in the Code.

3) **Income from the sources {Section 2(1)(x)}.-** The criteria for income from all sources means the income for the dependents as notified by the Employees State Insurance Corporation (ESIC) for the purpose of availing medical benefit or as specified by the State Government by notification.

4) **Competent person {Section- 2(1)(l)}.-** (1). The Chief Inspector cum Facilitator may recognize any person as a Competent Person within such area and for such period as may be specified for the purposes of carrying out tests, examinations, inspections and certification for such buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other process or plant and equipment as stipulated in the Code and the Rules made thereunder, located in a factory, if such a person possesses the qualifications, experience and other requirements as set out in the schedule annexed to this Rule:

Provided that *the Chief Inspector cum Facilitator may relax the requirements of qualifications in respect of a Competent Person, if such a person is exceptionally experienced and knowledgeable, but not the requirements in respect of the facilities at his command:*

Provided further that *where it is proposed to recognize a person employed under the Chief Inspector cum Facilitator as a 'Competent Person', concurrence of the State Government shall be taken and such a person after being so recognized, shall not have powers of an 'Inspector cum facilitator'.*

Provided further that *the 'Competent Person' recognized under this provision shall not be above the age of 62 years and shall be physically fit for the purpose of carrying out the tests, examination and inspection.*

Provided further that *the State Government may, by notification, amend the* schedule annexed to this Rule.

(2) The Chief Inspector-cum-Facilitator may recognize an institution of repute, having persons possessing qualifications and experience as set out in the Schedule annexed to this rule, for the purposes of carrying out tests, examinations, inspections and certification for buildings, dangerous machinery, hoists and lifts, lifting machines and lifting tackles, pressure plant, confined space, ventilation system and such other process or plant and equipment as stipulated in the Code and the Rules made thereunder, as Competent Person within such area and for such period as may be specified.

(3) The Chief Inspector-cum-Facilitator on receipt of an application, in Form-1 and Form-2, from a person and an institution respectively, intending to be recognized as a Competent Person's, shall register such application; and within a period of 60 days from the date of receipt of application, and after having satisfied himself as regards competence and facilities available at the disposal of the applicant, either recognize the applicant as a "Competent Person" and issue a certificate of competency in Form-3 or reject the application specifying the reasons thereof.

(4) The Chief Inspector cum Facilitator may, after giving an opportunity to the competent person of being heard, revoke the certificate of competency,

(i) If he has reason to believe that the competent person,

(a) has violated any condition stipulated in the certificate of competency, or;

(b) has carried out a test, examination and inspection or;

(c) has acted in a manner inconsistent with the intent or the purpose of this Code or the Rules made thereunder; or;

(d) has omitted to act as required under the Code and the Rules made thereunder; or;

(ii) For any other reason to be recorded in writing;

Explanation: For the purpose of this rule an institution includes an organization.

(5)The Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing, require recertification of lifting machinery, lifting tackles, and pressure plant or ventilation system as the case may be, which has been certified by a competent person outside the state.

Schedule

[Rule 4]

Sr. No.	Section Or Rule UnderWhich Competence Is Required	Qualification	Experience	Facilities At Disposal
1	Rules Made Under Section 79 Certification Of Buildings And Their Stability To Be Used As Factory	(A) Bachelors Degree In Civil Or Structural Engineering Or Its Equivalent From Recognized University.	(I) An Experience Of A Minimum Period Of Five Years In Design, Or Construction Or Testing Or Repair Of Structures. Provided That Experience For Those Who Possesses Master`S Degree Shall Be Minimum Of Three Years.	
			(Ii) Knowledge Of Non- Destructive Testing, Various Standards And Codes Of Practices That Are Current And The Effect Of The Vibrations And Natural Forces On The Stability Of The Building; And	
			(Iii) An Ability To Arrive At A Reliable Conclusion With Regard To The Safety Of The Structure Or The Building.	
2	Rules Made Under Section 18 Dangerous Machines	Bachelor's Degree In Mechanical, Or Production, Electrical Engineering Or Its Equivalent From Recognized University.	(i)An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Operation Or Maintenance Or (b) Testing, Examination and Inspection of Relevant Machinery, Their Guards, Safety Devices and Appliances. (Ii) Should :- (A) Be Conversant With Safety Devices And Their Proper Functioning	Gauges Dangerous Machine.
			(B) Be Able To Identify Defects And Other Causes Leading To The Failure.	
			Provided That Experience For Those Who Possesses Master's	

			Degree Shall Be Minimum Of Three Years; And (C) Have Ability To Arrive At A Reliable Conclusion With Regard To Proper Functioning Of Safety Devices, Appliances And Machine Guards	
3	Rules Made Under Section 18 Hoists & Lifts	Bachelor's Degree In Mechanical Or Production, Electrical Engineering Or Its Equivalent From Recognized University.	(i) An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Erection, Or Maintenance Or (b) Test and Inspection Procedure of Hoists & Lifts. Provided That Experience For Those Who Possesses Master's Degree Shall Be Minimum Of Three Years. (Ii) Should :- (A) Be Conversant With The Current And Relevant Codes Of Practices And Test Procedures; (B) Conversant With Other Statutory Requirements Covering The Safety Of Hoists And Lifts (C) Be Able To Identify Defects And Arrive At A Reliable Conclusion And With Regard To The Safety Of Hoists And Lifts	
4	Rules Made Under Section 18 Lifting Machines, Chains, Ropes And Lifting Tackles	Bachelor's Degree In Mechanical Or Metallurgical Or Production Engineering Or Its Equivalent From Recognized	(i) An Experience Of Working For A Minimum Period Of Five Years In:- (a) Design Or Erection Or Maintenance Or (b) Test and Inspection Procedure of Lifting Machines, Chains,	

		University	Ropes and Lifting Tackles.	
			Provided that experience for those who possesses master`s degree shall be minimum of three years. (ii) Should :- (a) Be conversant with the current and relevant codes of practices and test procedures. (b) fracture machines and metallurgy of the material of construction; and (c) Heat treatment or stress relieving techniques as applicable to stress bearing components and parts of lifting machinery and lifting tackles. (d) Capable of identifying defects and arriving at reliable conclusion and with regard to the safety of lifting machinery, chains, ropes and lifting tackles	
5	Rules made under Section 18 Pressure Plants	Bachelor`s Degree in Chemical or Mechanical or Metallurgical or Production Engineering its equivalent from recognized	(i) an experience of working for a minimum period of five years in:- (a) design or erection or maintenance or (b) testing, examination and inspection procedure of pressure plants Provided that experience for those	

		university	who possesses master`s degree shall be minimum of three years. (ii) Should :- (a) be conversant with the current and relevant	
			codes of practices and test procedures relating to pressure plants; (b) conversant with statutory requirement concerning the safety of unfired pressure vessels and equipments operating under pressure (c) conversant with non-destructive testing techniques as are applicable to pressure vessels; and (d) able to identify defects and arriving at a reliable conclusion and with regard to the safety of pressure plants.	

6	Rules made under Section 18 Precautions against dangerous fumes, gases etc.	Bachelor`s Degree in Chemical engineering from recognized university	(i) Anexperienceof working for a minimum period of five years in; collection and analysis ofenvironmental samples and calibration of monitoring equipments. Provided that experience for those who possesses master`s degree shall be minimum of three years. (ii) should be (a) Be conversant with the hazardous properties of chemicals and their permissiblelimit values; (b) Be conversant with current techniques sampling and analysis ofenvironmental contaminants; and (c) able to arrive at a reliable conclusion as regards	meters, instruments & devices duly calibrated and certified for carrying out the tests and certification of safety for working in confined spaces
			the safety in respect of entering and carrying out hot work	

7	Rules made under Section 82 Ventilation systems.	Bachelor`s Degree in Chemical, Electrical or equivalent from recognized university.	(i) Aminimumoffive year experiencein design, fabrication, testingof ventilating system used for extractionand collectionof dust, fumes and vapours and otherancillary equipment.Provided that experiencefor thosewho possesses master`s degree shall be minimum of three years. (ii) he shall be conversant with relevant codes of practice andtest proceduresthatare currentinrespectof ventilation and extractionsystemfor fumes and (iii) be able to arrive at a reliable conclusion with regard to effectiveness of the system	Facilities for Testing the ventilating system instruments and gauges for testing adequacy

CHAPTER-II
REGISTRATION

5) **Application for registration (Section 3). - (1)** The employer seeking registration for an establishment, not already registered, shall apply electronically by giving details as specified in Form-4. The Form shall be signed digitally or in any other manner as may be required on the portal. The applicant shall be responsible for veracity of all information submitted in the application. Registration fees for the grant of registration certificate shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the state government from time to time at the rates given in the schedule: -

SCHEDULE

Number of employees to be employed	Fee for Registration
Up to 20	1000
21-50	2000
51-100	3000
101-150	5000
151-200	7500
201-250	10000
251-500	12500
501-750	15000
751-1000	17500
1001-1500	20000
1501-2000	25000
2001-3000	30000
3001-5000	40000
Above 5000	50000

Provided that if the application for Registration is submitted after expiry of the prescribed period specified under Section 3(1) (b), the application may be entertained only on payment of the late fee of twenty five percent of the registration fee, in addition to the fee payable as prescribed under the Schedule.

(2) The Permanent Account Number (PAN) of the applicant or the establishment allotted under Income Tax Act, 1961 or any other unique number allotted to the establishment under any other Act for the time being in force or any other

particular furnished in the form, may also be verified online.

(3) The certificate of registration shall be issued in Form-5 electronically immediately if the application is complete in all respect but not later than seven days from the date of submission of complete application, failing which such establishment shall be deemed to have been registered and the certificate of registration shall be auto generated:

Provided that in exceptional circumstances, the State Government may, (for such period), by notification, dispense with requirement of electronic registration in respect of establishment or class of establishment, and submission of application in Form 4 and issuance of certificate of registration under Form 5 .

(4) The certificate of registration shall be non-transferable and a copy of the certificate of registration shall be displayed in the premises of the establishment at any conspicuous place in hard copy or electronically.

(5) The registering officer under the Code may direct the employer, who fails to comply with the requirements of sub-rule (1), to comply within the time stated therein and such employer shall, thereupon comply with the instruction issued by the officer in this behalf.

(6) The employer in respect of an establishment already registered under any other Central/State labour law for the time being in force shall, update the registration particulars on the departmental website within four months from the date on which the Code comes into force.

(7) Any registration obtained by providing wrong information shall be liable to be cancelled, provided that establishment has been given an opportunity to show Cause, electronically or by registered post, as to why the certificate of registration should not be cancelled.

(8) The employer shall quote the Registration Number on all documents prepared or completed by him in connection with the Code or the Rules or the Regulations or the Scheme, as the case may be, and shall also quote in all correspondence with the office concerned.

(9) Any change in the ownership, management or any particular furnished in Registration Form submitted on the portal shall be updated on the portal by the employer within thirty days of such change.

(10) The employer of an establishment to which the provisions of the Code apply and whose business activities are in process of closure, may online apply for cancellation of registration on the portal after giving complete details of the dues payable under the Central Labour Codes:

Provided that no such application for cancellation of registration shall be entertained unless the employer has furnished all statutory returns, paid all statutory dues under the Central labour Codes and any other Central or State labour law in force in accordance with the law applicable for the time being, and also submitted a self-certification to that effect along with the application.

(11) The registering officer shall maintain a register of establishment electronically in Form-6 showing the particulars of establishment in relation to which certificates of registration have been issued by him.

(12) The employer shall, within thirty days of the commencement and completion of any work, intimate to the Inspector-cum-Facilitator, having jurisdiction in the area where the proposed establishment or as the case may be, the work is to be executed, intimating the actual date of the commencement, completion of work and cessation of establishment, as the case may be, in Form-7 annexed to these rules electronically and the same shall be auto-shared to EPFO and ESIC.

6) **Appeal (Section 4).-** (1) The employer aggrieved by the order of Registering Officer, may electronically file an appeal against such order before the Administrative Secretary as an appellate officer for such purpose within thirty days from the date of receipt by him of such order.

(2) Where the memorandum of appeal is in order, the appellate officer shall admit the appeal, acknowledge it and intimate admission of such appeal, and shall register the appeal in electronic form, and maintain it electronically in the register of appeals.

(3) When the appeal has been admitted, the appellate officer shall send the notice of the appeal to the registering officer, against whose order the appeal has been preferred. The registering officer shall thereupon send the records of the case to the appellate officer online electronically.

(4) On receipt of the appeal, the appellate officer shall send a notice electronically or by registered post to the appellant to appear before him on such date and time as may be specified in the notice for the hearing of the appeal.

(5) If on the date fixed for hearing, the appellant does not appear, the appellate officer may dismiss the appeal for default of appearance of the appellants, and shall send copy of the order to the applicant electronically.

(6) Where an appeal has been dismissed in default, the appellant may apply electronically to the appellate officer for the restoration of the appeal within

thirty days from the date of electronic receipt of the order. If the appellate officer is satisfied that the appellant was prevented by sufficient cause from appearing, the appellate officer shall restore the appeal.

(7) The order of the Appellate Officer shall be communicated electronically or by registered post to the appellant and copy thereof shall be sent to the registering officer against whose order the appeal has been preferred. The Appeal shall ordinarily be disposed of within a period of thirty days from the date of receipt of appeal, unless the delay is attributed on the part of appellant.

7) **Notice of commencement and cessation of operation (Section 5).-** The employer of every establishment being factory or relating to contract labour or building or other construction works shall within thirty days of the commencement or cessation of operation, submit to the Registering Officer in Form-7, electronically. The notice of cessation of operation shall be enclosed with a certificate that the payment of all dues to the workers employed in the establishment have been made and the premises are kept free from storage of hazardous chemicals and substances.

CHAPTER-III
DUTIES OF EMPLOYER AND EMPLOYEE

8) **Annual Health Examination of employees {Section 6(1)(c).-** Every employer of an establishment shall arrange to conduct free of cost, medical examination, once in a calendar year, for every employee who is drawing wages equal to or less than ceiling notified by government from time to time. The medical examination shall be conducted by a qualified medical practitioner as per tests specified in the Form-8. The Medical Examination Reports shall be submitted to the concerned employer and employee.

Provided that an employer may avail facility through Employees' State Insurance Corporation (ESIC) for medical examination of the employee(s) under relevant rule of Social Security Code Rules.

9) **Letter of appointment to employee {Section 6(1)(f)}.-**No employee shall be employed in any establishment unless he has been issued a letter of appointment in the prescribed format as appended to this Rule:

Provided that, an employee who has not been issued an appointment letter containing the required particulars, shall be issued an appointment letter within three months of coming into force of these rules.

Format

a)	Name & Address of Establishment:	.....
b)	Haryana Udhyam Memorandum Number (HUM) of the establishment:	.....
c)	Name of employee:	.....
d)	Father's name:	.....
e)	Permanent Address:	.....
f)	Aadhar number:	.....
g)	UAN (if available)	.....
h)	ESIC number (if allotted)	.....
i)	EPF No. (If available)	.....
j)	Haryana Employment Exchange (HREX) Registration Number(if any)	.....
k)	Designation:	.....
l)	Category of skill:	.....
m)	Date by which employee has to join:	.....
n)	Detail of Basic Pay, Dearness Allowance etc.:	.....
o)	Avenue(s) for achieving higher wages/higher position:	.....

p) Applicability of social security EPFO and ESIC benefits: .....

q) Broad Nature of duties to be performed: .....

r) Any other information: .....

Signature

Occupier/employer/owner/authorized agent/ authorized manager

10) **Notice of accidents and dangerous occurrences {Section 10(1) and 11}.-** (1) Where at any place in an establishment, an accident occurs which results in the death of any person, the employer or occupier or manager of the establishment shall forthwith electronically send a notice thereof in **Form-9** within twelve hours to the Inspector-cum- facilitator, Chief Inspector-cum Facilitator, District Magistrate, Sub-divisional Magistrate, the officer-in-charge of the nearest police station; and the family members/ next of kin of the deceased person.

Provided that the information shall be given immediately after the accident by telephone/ mobile phone.

(2) Where at any place in an establishment, an accident occurs which results in bodily injury by reason of which injured person is prevented from working for a period of more than 48 hours from the time of accident, the employer or occupier or manager of the establishment shall forthwith electronically send a notice to the Inspector-cum-Facilitator in **Form-9** within 60 hours from the time of accident**.**

(3) Where in an establishment, there is any dangerous occurrence as specified in the schedule annexed hereto, whether causing any bodily injury or disability or not, within twelve hours from such occurrence, a notice in **Form-9** shall be sent to:

(i) The Inspector-cum-facilitator;

(ii) District Magistrate and Sub-divisional Magistrate;

Provided that if in the case of an accident or dangerous occurrence, death occurs to any person injured by such accident, or dangerous occurrence after the notices and reports referred to in the foregoing sub-rules have been sent; the employer or occupier or manager of the establishment shall forthwith send a notice thereof by telephone and electronically to the authorities and persons mentioned in sub-rules (1) and (2) and also have information about death confirmed in writing within 12 hours of the death.

Provided further that, if the period of disability from working for 48 hours or more referred to in sub-rule (2) does not occur immediately following the accident, or the dangerous occurrence, but later, or disability from working, occurs in more

than one spell, the report referred to in schedule (2) shall be sent to the Inspector-cum-Facilitator in the prescribed form within 24 Hours following the time when the actual total period of disability from working resulting from the accident or the dangerous occurrence becomes 48 hours.

SCHEDULE

The following classes of dangerous occurrences, whether or not they are attended by personal injury or disablement, namely:-

(i) bursting, of any plant or pipeline or equipment containing petroleum, steam, compressed air or other substance at a pressure greater than the atmospheric pressure;

(ii) collapse or failure of a crane, derrick, winch, hoist or other appliances used in raising or lowering persons or goods, or any part thereof, or the overturning of a crane.

(iii) explosion, explosion due to explosives, fire, leakage or release of harmful toxic gases, bursting out, leakage or escape of any molten metal, or hot liquid or gas causing bodily injury to any person or damage to any room or place in which persons are employed;

(iv) explosion of a receiver or container used for the storage at pressure greater than atmospheric pressure of any gas or gases (including air) or any liquid or solid resulting from the compression of gas.

(v) collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling building or construction material or breakage or failure of rope, chain or loose gears; overturning of cranes used in building or other construction work; falling of objects from height;

(vi) a spontaneous heating or outbreak of fire, or appearance of smoke, or other indication of heating or outbreak of fire in below ground mines;

(vii) collapse of any wall, floor, gallery, roof bridge, tunnel, chimney, wall, building or subsidence of soil or any other structure, platform, staging, scaffolding or any means of access including formwork; contact work, excavation and collapse of transmission;

(viii) spillage or leakage of hazardous substances and damage to their container;

(ix) an eruption or inrush of water or other liquid matter in mines;

(x) collapse, capsizing, toppling or collision of transport equipment within the establishment;

(xi) fall from height of any excavation, loading or transport machinery;

(xii) an instantaneous failure of a pillar, part of a pillar or several pillars in working below ground;

(xiii) a rock-burst in working belowground; a premature collapse of any part of the working;

(xiv) a breakage, fracture or failure of an essential part of any machine or apparatus whereby the safety of persons may be endangered;

(xv) a slide causing injury to any person, damage to any machinery, or interruption of normal mining operations;

(xvi) failure of dump or side in opencast working; a blowout;

(xvii) a failure of any structure or installation whereby the safety of persons may be endangered; or spark generated due to electrical flash-over causing burn injury to any person;

(xviii) a major uncontrolled emission of petroleum or chemical spillage;

(xix) any other occurrence of similar nature.

11) **Notice of disease {Section 12(1) and (2)}.-** (1) A notice in the following format shall be sent forthwith electronically within 24 hours, to the Inspector- Cum Facilitator or Chief Inspector- cum-facilitator, by the employer or occupier or manager of an establishment in which there occurs any disease as notified under the Schedule –III of the Code.

NOTICE OF DISEASE

1 Name of establishment:

2 Nature of establishment:

3 In case of Factory the Name of the Manufacturing Process:

4 Details of Patient:

(a) Name(s) of Patient(s):

(b) Works number of Patient(s):

(c) Address of Patient(s):

(d) Precise occupation of patient(s):

5 Nature of disease from which patient(s) is/are suffering:

6 Date of Detection of Disease:

7 Details of Medical Practitioner(s):

8 Has the case been reported to the Medical Officer :

Date

Signature of employer or
Occupier or manager

(1) If any qualified medical practitioner attends on a person who is or has been employed in an establishment and who is or is believed by the qualified medical practitioner to be suffering from any disease specified in the Third Schedule, the qualified medical practitioner shall without delay send a report in writing to the office of the Chief Inspector-cum-facilitator stating-

(a) the name and full postal address of the patient,

(b) the disease from which he believes the patient to be suffering, and

(c) the name and address of the establishment in which the patient is or was last employed.

12) **Duties of employee (Section 13).-** If an employee comes to know that of any unsafe or unhealthy condition in the establishment, he shall report to the employer, or health and safety representative, or safety officer, or manager in case of factory, as soon as practicable, electronically or in writing or telephonically or by registered post or speed post.

13) **Rights of Employee {Section 14(3)}.-** On receipt of information from the employee relating to the existence of an imminent danger to their safety and health, the employer shall take immediate remedial action in this regard. The employer, whether satisfied or not with such information, shall send a report forthwith of such actions taken, to the Inspector-cum-facilitator electronically or by registered post, or speed post.

CHAPTER-IV

OCCUPATIONAL SAFETY AND HEALTH

14) **Haryana Occupational Safety and Health Advisory Board (Section 17).-** The Haryana Occupational Safety and Health Advisory Board (herein after in these rules referred as Haryana Advisory Board) shall consist of :

a) AdministrativeSecretary, Labour Department—Chairperson/Chairman ex-officio;

b) Chief Inspector-cum-Facilitator— Member Secretary ex officio;

c) Chairman, Haryana State Pollution Control Board-- Member ex officio;

d) Director General, Urban & Local Bodies Department—Member ex officio;

e) Director General, Industries and Commerce Department—Member ex officio;

f) Director General, Health Department —Member ex officio;

g) Director, ESI Health Care, Haryana —Member ex officio;

h) Joint Chief Controller of Explosives, Faridabad—Member ex officio;

i) Regional Director, Employee's State Insurance Corporation, Faridabad—Member ex-officio;

j) three representatives of employers (to be nominated by State Government)—Member;

k) two eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline (to be nominated by State Government)— Member;

l) three representatives of employees / Trade Union as nominated by the State Government.

15) **Terms of the office to the non-official member (section 17).-** The term of each member referred in clause(j), (k) and (l) of Rule 14 shall remain for three years.

16) **Resignation (section 17). -** (1) any member referred to clause (j), (k) and (l) of Rule 14 may resign by a letter in writing addressed to State Government.

(2) The seat of such member shall remain vacant from the date on which his resignation is accepted by the State Government or on the expiry of thirty days from the date of receipt of the letter of resignation by State Government, whichever is earlier.

17) **Cessation of membership (section 17).-** If any member of the Board referred in clause (j), (k) and (l) of Rule-14, fails to attend three consecutive meetings of the Board, without obtaining the leave for such absence from the

Chairperson/Chairman of the Board, he shall cease to be a member of the Board:

Provided that the State Government may, if satisfied that such member was prevented by sufficient cause from attending three consecutive meetings, direct that the cessation shall not take place.

18) **Removal from membership (section 17).-** The State Government may remove from office any non-official member of the State Advisory Board, if in its opinion such member has ceased to represent the interest which he purports to represent.

19) **Meeting of the Board (section 17).-** The Board shall ordinarily meet once in three months;

Provided that the chairperson/Chairman shall, within fifteen days of the receipt of a requisition in writing from not less than one third of the members of the Board, call a meeting thereof.

20) **Notice of the meeting and list of business (section 17).-** Notice intimating the date, time and venue of every meeting together with a list of business to be transacted at the meeting, shall be sent by registered post, or by special messenger, to each member fifteen days before the meeting:

Provided that when the chairperson calls a meeting for considering any matter which in his opinion is urgent, notice of not less than three days shall be deemed sufficient.

21) **Quorum (section 17).-** No business shall be transacted at any meeting of the Board unless at least 4 members of the Board are present in that meeting:

Provided that if in any meeting of the Board less than 4 members are present, the Chairperson/ Chairman may adjourn the meeting to another date informing members present and giving notice to the other members that he proposes to dispose of the business at the adjourned meeting whether there is prescribed quorum or not, and it shall thereupon be lawful for him to dispose of the business at the adjourned meeting irrespective of the number of members attending.

22) **Minutes of the meeting (section 17).-** Every decision taken at a meeting of the Board shall be recorded in a minutes book at the same meeting and signed by the chairperson. The minutes book shall be a permanent record.

23) **Allowances of members (section 17).-** (1) The traveling allowance of an official member of the Board shall be governed by the rules applicable to him for journey performed by him on official duties and shall be paid by the authority paying his salary.

(2) The non-official members of the Board shall be paid traveling allowance

for attending the meeting of such Board at such rates as are admissible to a Grade-1 officer of the State.

24) **Safety Committee {Section 22(1)}.-** (1) The employer of the every establishment shall constitute a safety committee:-

(a) Wherein one hundred and fifty or more employees are ordinarily employed; or

(b) Which manufacture or store or handle an hazardous substance or carry out any hazardous process under the Code and employing fifty or more employees.

(2) The representatives of the management on Safety Committee shall include,-

(a) a senior official, who by virtue of his position in the establishment can contribute effectively to the functioning of the Committee. Such a senior official shall be the Chairman of the safety Committee;

(b) a Safety Officer or Medical Officer, wherever available, the Safety Officer in such a case shall be Secretary of the Committee;

(c) a representative each from the human resource, production, maintenance and purchase departments.

(3) The employee's representatives on this Committee shall be elected by the employees.

(4) The tenure of the Committee shall be three years.

(5) Safety Committee shall meet as often as necessary but at least once in every quarter. The minutes of the meeting shall be recorded and produced to the Inspector-cum-Facilitator on demand.

(6) Functions and duties of the Safety Committee shall include,-

(a) assisting and co-operating with the management in achieving the aims and objects outlined in the `Health and Safety Policy' of the establishment;

(b) dealing with all matters concerning health safety and environment and to arrive at practicable solutions to problems encountered;

(c) creating health & safety awareness amongst all employees;

(d) undertaking educational training and promotional activities;

(e) deliberating on reports of safety environmental and occupational health surveys, emergency plans, safety audits, risk assessment and implementation of the recommendations made in the reports;

(f) carrying out health and safety surveys and identify causes of accidents;

(g) looking into any complaint made on the imminent danger to the safety

and health of the employees and suggest corrective measures; and

(h) reviewing the implementation of the recommendations made by it.

(7) Where owing to the size of the establishment, or any other reason, the functions referred to in sub-rule (6) cannot be effectively carried out by the Safety Committee it may constitute sub-committees as may be required to assist it."

25) **Safety Officer {section 22(2)}.-** (1) There shall be one safety officer for establishment employing between 500 to 1500 employees. Over 1500 employees, there shall be an additional safety officer for every additional 1000 employees or fraction thereof.

(2) in case of factory carrying on hazardous process, there shall be one safety officer for establishment employing between 250 to 1000 employees. There shall be an additional safety officer for every additional 1000 employees or fraction thereof over 1000.

(3) In case of Building or other construction work, there shall be one safety officer for establishment employing between 200 to 1000 employees. There shall be an additional safety officer for every additional 1000 employees or fraction thereof over 1000 employees.

26) **Qualification of Safety Officer.-** (1) A person shall not be eligible for appointment as a safety officer unless he possesses–

(a) a recognized degree in any branch of engineering or technology and has had practical experience in a supervisory capacity for a period of not less than 2 years, or;

(b) a recognized degree in physics or chemistry and has had practical experience in a supervisory capacity for a period of not less than 5 years, or;

(c) a recognized diploma in any branch of engineering or technology and has had practical experience in a supervisory capacity for a period of not less than 5 years, or;

(d) a degree or diploma in industrial safety from Central Labour Institute or Regional Labour Institutes recognized by Central or any State Government.

(2) Notwithstanding anything contained in sub-rule (1), any person who-

(i)possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5years in a department of the

Central or State Government which deals with the administration of the Factories, Building or other Construction works; or

(ii) possesses a recognized degree or diploma in engineering or technology and has had experience of not less than 5years, full time, on training, education, consultancy, or research in the field of accident prevention in industry or in any reputed institution;

shall also be eligible for appointment as a safety officer.

27) **Duties of Safety Officer.-** The duties of a Safety Officer shall be to advise and assist in the fulfillment of its obligations, statutory, concerning prevention of personal injuries and maintaining a safe working environment and such duties shall include the following:-

(i) to advise the concerned departments in planning and organizing measures necessary for the effective control of personal injuries;

(ii) to advise on safety aspects in all job studies, and to carry out detailed job safety studies of selected jobs;

(iii) to check and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;

(iv) to provide advice on matters related to carrying out plant safety inspections;

(v) to carry out plant safety inspections in order to observe the physical conditions of work and the work practices and procedures followed by Workers and to render advice on measures to be adopted for removing the unsafe physical conditions and preventing unsafe actions by workers;

(vi) to render advice on matters related to reporting and investigation of industrial accidents and diseases;

(vii) to investigate selected accidents;

(viii) to investigate the cases of notify-able diseases listed in the Third Schedule to the Code;

(ix) to organize in association with the concerned departments, campaigns, competitions, contests and other activities which will develop and maintain the interest of the workers in establishing and maintaining safe conditions of work and procedures; and

(x) to design and conduct either independently or in collaboration with the training department, suitable training and educational programme for the prevention of personal injuries.

CHAPTER-V
HOURS OF WORK AND ANNUAL LEAVE WITH WAGES

28) **Weekly holiday {Section 26(2)}- (1)** For the purpose of section 26, there shall be posted up in a conspicuous place outside the office of every establishment a notice showing the weekly holiday. Where the weekly holiday is not the same day for all persons employed in the establishment, the notice shall show the holiday allowed to each relay, or set of persons or individual in Hindi, English.

(2) Conditions of exemption from weekly holiday or compensatory holiday shall be notified by the State Government from time to time.

29) **Compensatory holidays**- (1) Except in the case of worker engaged in any work which for technical reasons must be carried on continuously throughout the day, the compensatory holidays to be allowed under sub-section (3) of section 26 shall be so spaced that not more than two compensatory holidays are given in one week.

(2) The manager of the establishment shall display, on or before the end of the month in which holidays were lost, a notice in respect of workers allowed compensatory holidays during the following month and of dates thereof, at the place at which the notice of periods of works specified under section 26 is displayed. Any subsequent change in the notice in respect of any compensatory holiday shall be made not less than three days in advance of the date of that holiday.

(3) Any compensatory holiday or holidays to which a worker is entitled shall be given to him before he is discharged or dismissed and shall not be reckoned as part of any period of notice required to be given before discharge or dismissal.

30) **Wages for overtime {Section 27}.-**

(1) Where in an establishment, a worker works on piece rate basis, the time rate shall be taken as equivalent to the daily average of his full time earnings for the days on which he actually worked during the week immediately preceding the week in which the overtime work has been done, exclusive of any overtime and such time rate shall be deemed to be the rate for overtime of such worker.

(2) In calculating overtime on any day, a fraction of an hour between 15 to 30 minutes shall be counted as 30 minutes and in case of more than 30

minutes it shall be rounded and shall be counted as an hour on actual basis.

(3) In calculating the wages or earnings in the case of a worker paid by the month, the daily wages shall be 1/26th of his monthly wages; and in the case of any other worker it shall be the daily wages or earnings as the case may be.

(4) The spread over for the workers shall exceed twelve hours in any one day under the following works and circumstances in respect of factories, building or other construction work, namely;

(a) urgent repairs;

(b) work in the nature of preparatory or complimentary work;

(c) work which is necessarily so intermittent that the intervals during which they do not work while on duty ordinarily amount to more than the intervals for rest;

(d) work which for technical reasons must be carried on continuously;

(e) engaged in making or supplying articles of prime necessity which must be made or supplied every day,

(f) engaged in a process which cannot be carried on except during fixed seasons;

(g) engaged in a process which cannot be carried on except at times dependent on the irregular action of natural forces;

(h) engaged in an engine-rooms or boiler-houses or in attending to power-plant or transmission machinery;

(i) engaged in process on account of the break-down of machinery;

(j) engaged in the loading or unloading of railway wagons or lorries or
trucks;

(k) exceptional press of work and

(l) engaged in any work, which is notified by the Central Government in the Official Gazette as a work of national importance;

31) **Exemption for Double Employment {Section 30}:-** A worker may be allowed to work in more than one establishment on the same day if,-

(a) he is working on part-time basis; or

(b) he is doing a particular work of an occasional nature.

CHAPTER-VI
MAINTENANCE OF REGISTERS, RECORDS AND RETURNS:

32) **Notice of periods of work {Section 31(2)}.-** The notice referred to in sub-section (2) of section 31 shall be displayed at conspicuous places on a notice board or electronic board and maintained in Form-10 and copy of such notice shall be sent to Inspector- cum-facilitator electronically or by registered post.

33) **Maintenance and production of reports, registers and other records**

{Section 33(a)}.- Every employer shall-

(a) maintain electronically register of workers, wages, overtime, fine, deduction for damage or loss in Form-11 and shall be kept available at an office or the nearest convenient building within the precincts of the establishment;

(b) maintain registers of accident and dangerous occurrences required by sub-clause (v) of clause (a) of section 33 of the Code shall be maintained in a Form-12

(c) (i) enter, in case of manual registers and other records, legibly in ink in English and Hindi or the language understood by a majority of the persons employed;

(ii) enter, in case of electronic register and other records, in English and Hindi or the language understood by a majority of the employees

(d) preserve in original for a period of one calendar year after the date of the last report or entry;

Provided that when the original record is lost or destroyed before the expiry of one year period, true copies thereof, if available, shall be preserved for the prescribed period;

(e) produce, electronically or by registered post, on demand before the Chief Inspector-cum-facilitator or an Inspector-cum-facilitator or any person authorized in that behalf of the State Government.

34) **Display of notice {Section 33 (b)}.-** Every employer shall display at the conspicuous place of the workplace of the establishment under his control, notice in English, Hindi and in the Local Language understood by the majority of the workers mentioning the following detail:-

a) the name and address of the establishment (a board containing name and address of the establishment shall also be displayed outside the

establishment near main entrance),

b) hours of work,

c) wage period,

d) date of payment of such wages,

e) details of accident and dangerous occurrence in the establishment for the last five years,

f) name and address of the Inspector-cum-facilitator having jurisdiction to such establishment

g) date of payment of unpaid wages to such unpaid workers.

h) the addresses and contact numbers of emergency authorities of the District such as fire, police, hospitals etc.

i) the notices about hazardous chemicals specifying the nature of hazards, precautions and treatment etc.

j) summary of the code

35) **Wage Slip {Section 33(c)}.** Every employer shall issue wage slips, electronically or otherwise to the employees as prescribed under Rules framed by Appropriate Government under Code on Wages 2019 on or before payment of wages.

36) **Return {Section 33(d)}.-** Every employer of an establishment shall send annually a return relating to such establishment in electronic form in Form-13 to the Inspector- cum-facilitator having jurisdiction so as to reach him not later than 1st February following the end of each calendar year. with a copy to Director General, Labour Bureau electronically.

37) **Register of leave with wages {Section 33(a)}.-** (1) The owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in Form-14 .

(2) The register mentioned in sub- rule (1) shall be preserved for a period of two years after the last entry in them has been made and shall not be destroyed even after the expiry of that period unless it has been properly transferred to the new register.

38) **Muster Roll {Section 33(a)}.-** (1). The employer, the owner, agent or manager of every establishment shall maintain in respect of every employee thereof a record of leave with wages electronically or manually in Form-15 .

(2) The register mentioned in sub- rule (1) shall be preserved for a period of three years after the last entry in them has been made and shall not be destroyed even after the expiry of that period unless it has been properly

transferred to the new register.

39) **Attendance Card {Section 33(a)}.-**

i. No worker shall be required or allowed to work unless he/she has in his/her possession attendance card with up-to date entries, in Form-16 to be supplied by the employer. The attendance card shall always remain with the worker. The employer or his authorized person shall demand it only to make relevant entries therein, whenever necessary.

ii. If a worker loses his attendance card more than twice in a calendar year, the employer shall provide him/her with another copy duly completed from his record on payment of 25 rupees within two days of the payment otherwise another copy of attendance card shall be provided free of cost.

iii. Attendance card can be in electronic form also.

CHAPTER-VII
INSPECTOR-CUM-FACILITATOR AND OTHER AUTHORITY

40) **Qualification and experience of Chief Inspector-cum-Facilitator {Section 34(5)}.-** State Government may appointment any person as Chief Inspector-cum-Facilitator who:-

(1) Possesses bachelor`s degree in Engineering in any discipline with at least 10 years experience as an inspector under The Factories Act 1948 or Inspector-cum- Facilitator under The Occupational Safety, Health And Working Conditions Code 2020; or

(2) is an officer of Indian Administrative Services (IAS) having at least 9 years of experience.

41) **Powers of Inspector-cum-Facilitator for Plantation {Section 35(1)(IV)}.-** Inspector- cum-Facilitator can ask any type of record and can record statement of any person in relation to establishment or premises carrying plantation as per section 2(zx) of the Code.

42) **Power to take samples of any articles or substances {Section 35(1)(x)}.-** (1) The Chief Inspector-cum-Facilitator will recognize any laboratory accredited with National Accreditation Board for Testing and Calibration Laboratories for taking samples and giving analysis report required under the code.

(2) A notice on employer of the establishment from where or vicinity of which sample to be taken shall be served in **Form-17**.

(3) The recognized laboratory, on the order issued by the Inspector-cum-Facilitator in writing, shall take samples.

(4) Sample shall be taken in the presence of employer himself or person authorized by him

(5) Samples to be collected in two parts and to be placed in containers which shall be sealed marked and signed by person collecting sample and employer or his authorized person, and if the employer or his authorized person refuses to sign, then videography of the whole process of collection of samples may be done.

(6) One part of sample collected, sealed shall be handed over to the employer or his authorized person present and another part shall be sent forthwith to the laboratory for analysis.

(7) The findings shall be recorded in **Form-18** in triplicate and signed by the Analyst and sent to the Inspector-cum-Facilitator from whom the

order for sampling is received within 7 days from completion of analysis of sample.

(8) The expenditure of the sampling and analysis shall be borne by the employer of the establishment.

(9) On receipt of the report of the findings of the laboratory, the Inspector-cum- Facilitator shall send one copy of the report to the employer of establishment from whom the sample was taken for analysis, the second copy shall be retained by him for his records and the third copy shall be sent to Chief Inspector-cum-Facilitator for further action to be initiated.

43) **Powers and duties of Inspector-cum-facilitator (Section 35(1)(xiv)}.-** (1) Inspector- cum-Facilitator shall, after every inspection, as may be deemed necessary, issue prohibition or improvement notice in the Form-19 pointing out the non-compliance of provisions of safety, health and working conditions under the Code, and rules and regulations framed there under, to the employer or occupier or owner or master or officer-in-charge of the ship or their agent.

(2) An Inspector-cum-Facilitator shall, at each inspection, ascertain to what extent any shortcomings notified at a previous inspection have been rectified and the notices previously issued have been complied with. His findings and any shortcomings which may come to light during the inspection, together with any order passed by him under the Code or the regulations made there under shall be recorded and maintained.

(3) An Inspector-cum-facilitator for the purpose of the implementation of this code can photograph any person, inspect, examine, measure, copy, photograph, sketch or test, as the case may be, any building or room, any plant, machinery, appliance or apparatus any register or document or anything provided for the purpose of securing the health, safety or welfare of the employees employed in an establishment;

(4) An Inspector-cum-facilitator for the purpose of the implementation of this code in case he is a duly qualified medical practitioner, can carry out such medical examinations as may be necessary for the purposes of his duties under the code.

(5) An Inspector-cum-facilitator for the purpose of the implementation of this code shall have powers to prosecute, conduct or defend before a Court any complaint or other proceeding arising under the code or in discharge of his duties as an Inspector-cum-Facilitator.

(6) An Inspector-cum-facilitator for the purpose of the implementation of

the code may issue such orders to the employer of establishment to comply the orders issued under section 38 or any other section.

(7) An Inspector-cum-facilitator may exercise such other powers and performs such other duties as directed by the Government from time to time by way of an administrative order under the ambit of the Occupational Safety, Health and Working Conditions Code, 2020.

44) **Qualification and experience, duties and responsibilities of the experts empanelled under section 37.-** The applicant, for being recognized as Safety Auditor, shall possess the following qualifications and experience, etc.:-

Qualification and Experience. - The applicant shall hold, -

(i) Degree in Chemical or Mechanical or Electrical or Production Engineering and having five years' experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories;

Or

Diploma in Chemical or Mechanical or Electrical or Production Engineering and having Eight years' experience in manufacturing, maintenance, design, project or safety department in the supervisory or above capacity in factories;

or

Master Degree in Physics or Chemistry and having ten years' experience in, manufacturing or safety Department of any factory in the supervisory or above capacity in factories,

and

One year full time Diploma in Industrial Safety recognized by the Board of Technical Education or All India Council of Technical Education or a recognized University;

or

(ii) Degree or diploma in any branch of Engineering and having fifteen years' of experience in Factory Inspectorate or Directorate of Industrial Safety and Health or Director General Factory Advisory Services and Labour Institute or Regional Labour Institute or National Safety Council or hazardous factories of PSU's of Govt. of India.

(iii) The applicant shall not be directly or indirectly interested in the factory or in any process or business carried on therein or in any patent or machine connected therewith, in respect of which the safety audit is to be conducted.

(iv) If the age of applicant is more than 65 years, he shall submit a Certificate of physical fitness for carrying out safety audit of factories issued by civil

surgeon or certifying surgeon alongwith the application for recognition or renewal of recognition.

(v) No Safety Auditor shall be above 70 years of age for the purpose of working under this Code.

Duties and responsibilities.-

(i) Safety Auditor shall maintain a log book of all safety audits undertaken by him indicating the name and address of the audited factory, name of the person who has carried out safety audit, contact persons, date of the audit and date of submission of the audit report to the Occupier and Chief Inspector cum Factories.

(ii) Safety Auditor shall not conduct a Safety Audit of any factory where such auditor or person is employed, or an occupier, partner, director, or manager of that factory or of any factory owned, operated, managed, or conducted by immediate family members, relatives or extended family members or wherein that auditor has any direct or indirect interest whatsoever. An auditor shall not carry out the safety audit of those factories to which that auditor supplies any plant, machinery, raw material, safety equipment's or other materials or equipment.

(iii) Safety Auditor shall not disclose, even after he ceases to be a recognized auditor or employee of the institution, any manufacturing or commercial secrets or working.

(iv) Safety auditor shall sign a non-disclosure agreement before empanelment as safety auditor under the code/rules.

Processes or other confidential information which may come to his knowledge in the course of their duties as an auditor. Any failure in this regard may make such auditor liable for criminal or civil proceedings, in accordance with the law for the time being in force.

45) **Manner of providing Alternative Employment {Section 38 (1)(A)(d)}-** Every employer shall provide employment to the affected workers in the other areas of the establishment and provided that the wages of the affected person shall not be reduced due to alternate employment.

Provided further that if the whole or a part of establishment working as factory or building and other construction site is fully closed by an order, then it shall be the duty of the employer to pay wages to the affected workers as per Code of Wages 2020 for the number of days for which the establishment was closed.

46) **Appointment of Medical officer {Section 42(1)}-** The qualification for the Appointment of medical practitioner as medical officer in relation to factory, plantation, motor transport undertaking and any other establishment are as follows:

(i) Must possesses any recognized medical qualification as prescribed under the National Medical Commission Act,2019(30 of 2020) and who is enrolled on a Indian Medical Register as defined in clause (m) of Section 2, and on a State Medical Register as defined in clause (v) of section 2 of the Act.

(ii) In respect of factory carrying hazardous process or dangerous operations, in addition to the qualifications mentioned in sub rule (i) a person should possess a certificate of Training in Industrial Health of minimum three months duration recognized by the State Govt. or shall possess a diploma in Industrial Health or equivalent.

47) **Dangerous occupations for medical examination and duties of Medical Officer under {Section 42(2)}.-**

1. The medical officer shall examine, certify and medically supervise the workers engaged in dangerous occupation or process as prescribed below:
   (i) Operations declared dangerous under Section 82 of the code.
   (ii) Factories carrying hazardous process as per Schedule 1 of the code.
   (iii) Treatment of Biomedical waste.
   (iv) Sewerage Treatment
   (v) Solid waste management
   (vi) Marble cutting
   (vii) Ready mix concrete
   (viii) Hot Mix concrete
   (ix) Working at height
   (x) Operation of crane/heavy duty machinery
   (xi) any other establishment or class of establishment notified by the state government from time to time
2. (i) On receipt of a reference under clause (c) sub section (2) of section 42 of the code, the Medical Officer shall, after giving prior notice regarding date, time and place for medical examination and upon examining the person sent for such examination, prepare the age and fitness certificate and deliver the same to the manager of the establishment concerned after retaining a copy thereof.

(ii) The medical officer may seek opinion of specialists like radiologist, dentist and orthopedic surgeon as the case may be, for the purpose of determination of age.

(iii) Medical Officer shall carry out such examination and furnish such report as state government may direct:

(a) for examination and certification of workers in an establishment in such dangerous operations as mentioned under section 82 and the occupation/processes as specified in First Schedule to the Code;

(b) for medical supervision of any establishment or class of establishment where cases of chronic occupational illness have occurred due to arduous nature of any process carried on or hazardous condition of work;

(c) in respect of any establishment or class of establishment or description of establishment in which operations involve any risk of injury to the health of any person or class of persons employed therein;

(d) to undertake occupational health survey for any or class of an establishment, where cases of illness have occurred or there is prevalence of diseases as prescribed in Third Schedule of the code.

(e) in any establishment or any class of establishments as notified by the State Government from time to time.

48) Medical Examination and Certification of Adolescent {Section 42(2)(c)}.-

(1) A medical officer shall, on the application of any adolescent or his parent or guardian accompanied by a document signed by the employer of an establishment that such person will be employed therein, if certified to be fit for work in an establishment, or on the application of the employer of the establishment in which any adolescent wishes to work, examine such person and ascertain his fitness for work in an establishment.

(2) The medical officer, after examination, may grant to such adolescent, in Form-20, or may renew; a certificate of fitness to work in an establishment as an adolescent, if he is satisfied that the adolescent has completed his/her fifteen years of age, that he has attained the prescribed physical standards and that he is fit for such work;

Provided that unless the medical officer has personal knowledge of the place where the adolescent proposes to work and of the manufacturing

process in which he will be employed, he shall not grant or renew a certificate under this sub-rule until he has examined such place

(3) A certificate of fitness granted or renewed under sub-rule (2);

(a) shall be valid only for a period of twelve months from the date thereof:

(b) may be made subject to conditions in regard to the nature of the work in which adolescent may be employed, or requiring re-examination of the adolescent before the expiry of the period of twelve months.

(4) A medical officer shall revoke any certificate granted or renewed under sub-rule

(2) if in his opinion the holder of it is no longer fit to work in the capacity stated therein in an establishment.

(5) Where a certificate under this rule with reference to any adolescent is granted or renewed subject to such conditions as are referred to in sub-rule (3), the adolescent shall not be required or allowed to work in any establishment except in accordance with those conditions.

(6) (a) A fee of rupees one thousand shall be payable for a certificate under this rule and must be paid by the employer and shall not be recoverable from the adolescent, his parents or guardian.

(b) Fee required under sub-rule (a) will be paid on portal in system prescribed and shall be credited to notified Head.

(7) Medical Officer shall maintain record of examinations under this rule in register in Form-21.

49) Safety of employment of women in dangerous operations {Section 44}:

(1) No women shall be allowed or required to work near the machinery in motion without wearing tight fitting clothing and suitable Personal Protective Equipments so as to avoid the risk of entanglement of cloths and bodily injury from any moving part.

(2) As far as practicable, women shall not be engaged in any workplace involving poor ergonomics detrimental to the safety and health.

(3) The employer shall ensure that the women are not allowed to expose to materials if any which may influence or affect their menstrual cycles, reproductive health or pregnancy.

(4) The State Government may by notification prescribe the adequate safeguards to be taken by the employer prior to the employment of

women in dangerous or hazardous processes in any establishment or class of establishment or in any particular hazardous or dangerous process.

CHAPTER-VIII
SPECIAL PROVISIONS RELATING TO EMPLOYMENT OF WOMEN

50) **Conditions relating to safety, holidays and working hours or any other condition to be observed by the employer (Section 43).-** Women shall be entitled to the employment in all establishments for all type of work under the code with their consent between 07:00 PM to 06:00 AM subject to the conditions as notified by the State Government from time to time.

51) **Manner of requiring the employer to provide the adequate safeguards (Section 44).-** The state government may by notification prescribe the adequate safeguards to be taken by the employer prior to the employment of woman worker in dangerous or hazardous processes in any establishment or class of establishment or in any particular hazardous or dangerous process.

CHAPTER-IX

SPECIAL PROVISIONS FOR CONTRACT LABOUR & INTER-STATE MIGRANT WORKER, ETC

PART I

Contract Labour

52) Qualification, Criteria and Manner of making application for licensing of establishments along with Forms, terms and conditions of license {Section 47(3)(a)}.

(1) Every application by a contractor for grant of a license shall be made electronically in Form-22.

(2) The applicant should not be a person who :

(a) Is a minor;

(b) Is of unsound mind and stands so declared by a competent court;

(c) Is an un-discharged insolvent under the Insolvency and Bankruptcy Code, 2016 or earlier code on the same subject.

(d) Has been convicted of an offence, in the last five years, involving moral turpitude.

(3) The application shall be accompanied by a treasury/online receipt showing the payment of fees for the registration of the establishment.

(4) Every application shall be submitted online on the official portal made for that purpose.

(5) The license shall be non-transferable.

(6) The number of workmen employed as contract labour in the establishment shall not, on any day, exceed the maximum number specified in the license;

(7) save as provided in these rules, the fees paid for the grant, for renewal of the license or as the case may be, shall be non-refundable;

(8) The rates of wages payable to the workmen by the Contractor shall be as per the provisions of Code on Wages, 2020.

(9) In case where the worker employed by the contractor performs the same or similar kind of work as the workers directly employed by the principal employer of the establishment, the wage rates, holidays, hours of work and other conditions of service of the workers of the contractor shall be same as applicable to the workers directly employed by the principal employer of the establishment for the same or similar kind of work.

(10) The licensee shall notify any change in the number of workmen or the nature and conditions of work to the licensing officer.

(11) A copy of the license shall be displayed prominently at the premises where the contract work is being carried on.

(12) If the application of the contractor is complete in all respects as prescribed, the license shall be granted to the contractor in Form-23.

53) **Fees for issuing of license {Section 48(2)}.-** (1) Before issuing a license to the contractor, a security deposit in the form of bank guarantee for an amount calculated at the rate of rupees two thousand for each worker to be employed as contract labour, in respect of which the application for license has been made, shall be deposited by the contractor for performance of the conditions of the license and compliance with the provisions of the Code or the rules made there under.

Provided that the state government may by notification amend the amount of bank guarantee for performance of the conditions of the licence from time to time.

(2) Wherein the issued contract license had expired, based on the request of the applicant, the licensing officer may adjust the security deposit in respect of his application for new license.

(3) The fees to be paid for the grant of a license shall be as specified in the table below, namely;

A	No license is required up to 49 contract labour	Nil
B	50 but does not exceed 100 contract labour	Rs. 1000
C	101 but does not exceed 300 contract labour	Rs. 2000
D	301 but does not exceed 500 contract labour	Rs. 3000
E	501 but not exceeding 1000 contract labour	Rs. 5000
F	1001 but not exceeding 5000 contract labour	Rs. 10000
G	5001 but not exceeding 10000 contract labour	Rs. 20000
H	10001 but not exceeding 20000 contract labour	Rs. 30000
I	20001 and above contract labour	Rs. 40000

All fees paid under these rules shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time.

54) Renewal and Amendment of license {Section 48(3)}-

(1) For renewal of License:-

(a) every contractor shall apply electronically to the licensing authority in **Form-22** on the Haryana Labour Department web portal made for the purpose for renewal of the license.

(b) Every such application shall be submitted on the said portal at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

(c) The security deposit and the fee chargeable for renewal of the license shall be the same as for the grant of license for same numbers of employees.

Provided that if the application for renewal is not received within the time specified in sub-rule (2), an additional fee of twenty five per cent, shall be payable for such renewal.

(d) It shall be the responsibility of the Designated Authority to renew license within 30 days.

(e) The renewed licence in **Form-23** shall be issued to the applicant after depositing the renewal fees.

(2) Amendment of License for Contractor {Section 48(3)}–

(a) Every contractor to whom license is issued shall make an application for any amendment to the designated authority on the official portal in Form-22 before any change or within three days from such change.

(b) The fee for the amendment of a license shall be five hundred.

(c) The amended licence in Form-23 shall be issued to the applicant after depositing the amendment fees.

(3) Register of Contractors {Section 48(3)}-A register of contractors shall be maintained by the Designated Authority in Form-24 to whom license is issued.

55) Refund of security deposit-

(1) On expiry of the period of license the contractor may, if he does not intend to have his license renewed further, make an application electronically to the licensing authority for the refund of the security deposited by him along with copy of license and notice of completion of work and bank details in which amount is required to be refunded.

(2) If the Licensing authority is satisfied that there is no breach of the

conditions of license or there is no order for the forfeiture of security deposit or any portion thereof, he shall direct the refund of the security deposit to the applicant.

(3) If there is any order directing the forfeiture of any portion of contractors security deposit, the amount to be forfeited shall be deducted from the security deposit, and balance, if any, shall be refunded to the contractor.

(4) Any application for refund shall, as far as possible, be disposed of within 30 days of the receipt of the application.

56) Responsibility of contractor {Section 48(4)}.-

1) The rates of wages payable to the workers by the contractor shall not be less than the rates prescribed under the Code on Wages, 2019 (No. 29 of 2019) and where the rates have been fixed by agreement, settlement or award, not less than the rates fixed.

2) In case where the worker employed by the contractor perform the same or similar kind of work as the worker directly employed by the principal employer of the establishment, the wage rates, holidays, hours of work and other conditions of service of the workers of the contractor shall be the same as applicable to the workers directly employed by the principal employer of the establishment on the same or similar kind of work. In case of any dispute whether the work is of similar kind, the matter be referred to the Inspector-Cum Facilitator whose decision shall be final.

3) In other cases the wage rates, holidays, hours of work and conditions of service of the workers of the contractor shall be such as specified under the Code and rules made there under.

4) All contract labourer shall be covered under the Employees Provident Fund Organization and Employee‘s State Insurance Corporation.

5) The contractor shall notify any change in the number of workers or conditions of work to the Licensing Authority, electronically.

57) Intimation of work order and time limit for intimation (Section 50).-

1) Within fifteen days of the receipt of a contract work order, every contractor shall intimate about the contract work order containing the details such as the name of the principal employer, address of the premises where work is being undertaken, date of commencement of the contract work, the number of contract labour (category wise) employed under that work order, duration of work orders.

2) The details of work order shall be sent by the contractor or his authorized representative.

3) The intimation shall be sent electronically to the Chief Inspector-cum-Facilitator or his representative and to the Licensing Officer as maybe notified by the State Government through official Gazette.

58) Revocation or suspension of license.-

1) If the Licensing Authority is satisfied that the license has been obtained by misrepresentation or suppression of any material fact or if the contractor has failed to comply with the conditions subject to which license was granted, the Licensing Authority shall issue a show cause notice of 15 days to the contractor electronically. On receipt of the reply, if any, from the contractor within 15 days, the Licensing Authority shall examine the same and in case the licensing authority feels that the continuation of contract business by the contractor is going to lead to grave harm to the workers, he may pass a Speaking Order recording the reasons for revocation or suspension or otherwise and communicate to the contractor electronically.

2) If the contractor has complied with the said provisions of the code and rules made thereunder within the stipulated time period, the Licensing Authority shall revoke the suspension by passing a speaking order or else the suspension may be continued.

3) If the contractor fails to comply with the directions as in sub-rule (1), the Licensing Authority may forthwith pass an order of revocation of license, recording the reasons thereof and communicate to the contractor electronically. The copy of the order shall be endorsed electronically to the Authorities of Labour Department notified by the State Government along with a copy to the same to the notified Central Authority.

59) Responsibility of Payment of wages (Section 55).-

1) The contractor shall fix the wage periods in respect of which wages shall be payable and no wage period shall exceed one month.

2) The wages of every person employed as contract labour in an establishment or by a contractor shall be paid before the expiry of seventh day after the last day of the wage period in respect of which the wages are payable.

3) The wages shall be disbursed through bank transfer or electronic mode only.

60) Making payment of wages from the security deposit amount {Section 55(4)}.- If the contractor or principal employer does not pay the wages to the

contract labour employed by him, the Chief Inspector-cum-Facilitator or his representative or the competent officer as may be notified shall conduct or cause to conduct, an inquiry and after giving an opportunity to be heard to the contractor shall pass an order to make payment if any, of such wages from the amount deposited by the contractor as security deposit. The contractor shall re-furnish the security deposit within a period of fifteen days or else his license will be liable to be suspended.

61) **Experience Certificate (section 56).-** Every concerned contractor shall issue on demand, experience certificate in **Form-25** to the contract labour giving details of the period, work performed, experience gained in various fields performed by such contract labour.

62) **Prohibition of employment of contract labour {Section 57(2)(b)}.-**

1) If a question arises as to whether any activity of an establishment is a core activity or activities, the work performed is of intermittent or of casual nature; the aggrieved party may make an application to the Chief Inspector-cum-Facilitator or any other Officer as notified by the State time to time giving reasons along with supporting documents.

2) The State Government may refer suo-moto, any such question relating to core activity or activities, the work performed is of intermittent or of casual nature, forwarded to the Haryana Occupational Safety and Health Advisory Board constituted under Section 17 of the Code for deciding the matter and to prohibit by notification in the official Gazette, employment of contract labour in any process, operation or other work in any establishment.

The State Board on the reference of the State Government, decide and may prohibit the contract labour in any process, operation or other work in any establishment, by taking following factors into consideration:-

(a) Whether the process, operation or other work is incidental to, or necessary for the industry, trade, business, manufacture or occupation that is carried on in the establishment;

(b) Whether it is of perennial nature, that is to say, it is of sufficient duration having regard to the nature of industry, trade, business, manufacture or occupation carried on in that establishment;

(c) Whether it is done ordinarily through, regular workmen in that establishment or an establishment similar thereto;

(d) Whether it is sufficient to employ considerable number of whole time workmen.

PART-II

Inter-state Migrant Worker

63) **Journey allowance to Inter-State Migrant Worker (Section 61).-** The employer shall pay a lump sum amount directly in the Aadhar seeded Bank Account of the inter-state migrant worker on account of fare for to & fro journey by train (not less than II Class Sleeper) or by bus or any other mode of passenger transport from the place of employment to the place of residence in the home state in the event of the following, namely:

if he has worked for a period of not less than 60 days in the concerned establishment(s)in preceding twelve months;

Provided that the journey allowance shall be given to an inter-state migrant worker once in twelve months.

However, in the event of change of employer by the inter-state migrant worker during the middle of the employment period, and when he has not availed the journey allowance from his previous employer, then, the new employer (where the inter-state migrant worker is now working and such worker has completed sixty days in preceding twelve months including the period spent with the previous employer), shall give journey allowance, to the inter-state migrant worker, on the presentation of a certificate issued by the previous employer (along with the copy of bank statement of preceding 12 months).

64) **Study of inter-state migrant workers (Section 64).-** (1). The state government suo-moto or in consultation with the stake holder(s) or expert may hold survey of inter-state migrant workers.

(2) The State Government may identify the studies to be carried out to promote safety, health and welfare of inter-state migrant workers. Wherever required the State Government may also consult the stakeholders and the Central Government or expert organizations involved in the safety, health and welfare of inter-state migrant workers.

PART-III

Audio-Visual Workers

65) **Authority to whom a copy of the agreement shall be forwarded by the producer {Section 66(3)}.**

The agreement to be entered between producer and employees of audio-visual programme as envisaged in section 66(2)(a) shall be forwarded to Chief-Inspector-cum-Facilitator.

66) **Dispute Resolution process {Section 66(4)(vii)}.-** Dispute resolution process or mechanism, Constitution and other details shall be same as provided under the Industrial Relations Code, 2020 and rules framed thereunder.

PART-IV

Beedi and Cigar Workers

67) **License to industrial premises and person {Section 74(2),(4) and (5)}.-**

(1). The Chief Inspector-cum- Facilitator shall, in deciding whether to grant or refuse a licence, have regard to the following matters:

(a)the suitability of the place or premises which is proposed to be used for the manufacture of beedi or cigar or both;

(b)the previous experience of the applicant;

(c)the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;

(d)whether the application is made bona fide on behalf of the applicant himself or in benami of any other person;

(e) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed.

(2). Subject to the provisions of section 119, any person who intends to use or allows to use any place or premises specified in sub section (1) of Section 74 shall make an application to the Authority referred to in sub section (1) of Section 119 in Form-29 and on payment of fees as provided under the schedule prescribed under Rule 81, for a license to use, such premises as an industrial premise. On the receipt of a valid application, the Chief Inspector-cum- Facilitator shall grant a license in Form-30 within 45 days from the date of receipt of application.

68) **Plan of the place {Section 74(3)}.-** The application for the grant of the license as prescribed under Rule 67 shall be accompanied with a plan of the

place or premises duly approved by Chief Inspector-cum-Facilitator. The plans shall be prepared in accordance with the provisions as prescribed under Rule 73.

69) Welfare of the labour in the locality {Section 74(4)(e)}.-

1) Every employer of the establishment where beedi and cigar work is carried out, shall arrange to conduct free of cost, medical examination for every employee once in a calendar year. The medical examination shall be conducted by a qualified medical practitioner as per tests specified in the Form-8. The Medical Examination Reports shall be submitted by the qualified medical practitioner to the concerned employer and employee.

   Provided that an employer may avail facility for medical examination of the employee(s) under relevant rule of Social Security Code Rules, 2021 through Employees' State Insurance Corporation (ESIC).

2) The employer shall ensure that welfare of the labour in the locality is increased through awareness activities undertaken at least once in six months. A record of the activities undertaken along with names of the participants shall be kept.

3) Notices and warning signs shall be put up upon and around the premises warning about the nature of activities undertaken in the premises.

4) Cautionary notice in Hindi or in a language understood by the majority of workers shall be prominently displayed to draw attention of all workers about the hazards involved in the process along with do and don‘ts.

5) The children shall not be allowed inside the premises under any circumstances. In case of exceptional circumstances if admittance of children is necessary for medical or other reasons the information of such fact shall be sent forthwith to the Inspector-cum-Facilitator of the area.

70) Renewal of license {Section 74(6)}.-

1) A Licence shall be renewed by the Chief Inspector –cum – Facilitator under section 119 in electronic mode, on payment of the same fee which is charged for the grant of a licence for a period between one year upto ten years for which application has been made within 45 days after the receipt of complete valid application for renewal.

2) Occupier of every factory shall submit application in Form-29 in electronic mode, for the renewal of licence, accompanied by fee paid

showing that the renewal fee including additional registration fee wherein dangerous operations are carried on has been deposited, and if the application is so made the premises shall be held to be duly licensed until such date as Chief Inspector-cum-Facilitator renews the licence.

3) Every such application shall be submitted in electronic mode at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

4) If the application is not made before at least 30 days prior to expiry of licence period, an additional fee equal to 25 percent of the licence fee shall be payable by the licensee:

Provided that Chief Inspector-cum-Facilitator may, if satisfied that the delay was unavoidable and beyond the control of the occupier reduce or remit the payment of the additional fee as he thinks fit.

71) **Appeals**.- Any person aggrieved by the decision of the competent authority refusing to grant or renew a license or cancelling or suspending a license may, within 15 days from the cancellation or suspension of licence and on payment of Rs.1000/-, appeal to the Administrative Secretary of the Labour Department or the authority as the State Government may, by notification, specify in this behalf, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a license or cancelling or suspending a license.

72) **Permission to work by employees outside industrial premises {Section 76(1).**

1) The State Government may permit the wetting or cutting of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees.

2) The record to be maintained by the employer of the work permitted under sub-section (1) of section 76 to be carried on outside the industrial premises shall be in Form-31.

PART-V

Factories

73) **Submission of Plans (Section 79).-**

(1) No building shall be constructed or shall be taken into used as a factory on any site on which a factory is to be situated or for the extension or use as a factory or a part of a factory after the date of the commencement of these rules, unless plans in respect of such building

are approved by Chief Inspector-cum-Facilitator, Haryana.

(2) The State Government or the Chief Inspector-cum- Facilitator may require for the purposes of the Code, submission of plans of any building / structure / premises to be taken in use as a factory which was either in existence on the date of commencement of the Code or which has not been constructed or extended since then.

(3) Every occupier applying for approval of the plans under the rule shall appoint a person declared competent person under the Code for drawing up of building or structural drawings and for issuing the stability certificate of the building or structure.

(4) Application for approval of the plans shall be made in the electronic mode to the Chief Inspector-cum-Facilitator in Form-26 which shall be accompanied by the following documents and specifications certified by persons possessing the qualifications as hereinafter provided:—

(i) Particulars of the rooms in the factory in Form-27.

(ii) Reply to the questionnaire annexed to Form-27.

(iii) The application shall consist of building plans, sections and elevations be drawn to the scale and shall include:-

(a) the site plan of the factory and immediate surroundings including adjacent buildings and other structures, road, drains, etc.;

(b) floor plans of all the floors together with covered area clearly indicating the size and spacing of all framing members, sizes of rooms , staircases, ramps, lift wells, means of lighting, ventilation, fire-escapes, position & size of plant/machinery/equipment, drinking water points, details of urinals/latrines, roof materials, washing facilities/drenching facilities, space for storing/drying of clothes, crèche, rest-room/ mess-room, canteen, ambulance room/occupational health center etc.

(c) Cross sections showing the height of the building/room.

(d) Cross sections through the staircase.

(e) The schedule indicating the size of the doors, windows, openings and other methods of ventilation of each room/ area.

(f) The schedule indicating number and size of plant / machinery / equipments etc.

(g) The schedule indicating area calculations of plot, ground

coverage, floors, buildings etc.

(h) Provision for differently-able person, photovoltaic solar power plant, rainwater harvesting system as required.

(iv) A flow chart of the manufacturing process supplemented by a brief description of the process in its various stages and showing raw materials/by-products/end product along with quantity/capacity.

(v) Letter of allotment from concerned agency which has developed the industrial area/industrial park if the factory is situated in industrial area/ industrial park or No Objection Certificate from any other local authority in which area the factory is situated.

(vi) Letter regarding classification of land from the Department of Town and Country Planning if site does not fall in industrial area/industrial park.

(vii) Safety Report in detail and List of chemicals to be used/stored/produced along with quantity.

(viii) Details of cess paid.

(ix) Such other particulars as the Chief Inspector-cum- Facilitator may require in relation to the application:

Provided that the occupier of the premises in use as a factory on the date of the commencement of these rules shall submit such application within thirty days of such commencement.

(5) All dimensions in plans shall be indicated in Units of Foot and Inch.

(6) The applicant and competent person shall duly sing digitally the application, plans, structural drawings, specifications and the certificates as required in the relevant forms and documents, before making submission.

(7) No addition/alteration/extension in the existing factory shall be made except those specified in the Table as below unless such additions, alterations or extensions are approved by Chief Inspector-cum-Facilitator, Haryana.

TABLE	
Sr. No	**Type of Additions/Alterations/Extension**
1	Boundary Wall upto height of 4 Feet.
2	Rooms/Cabins to be used for clerical/managerial/Pantry purposes.
3	Security picket/ Guard Rooms
4	Sheds for Vehicle Parking
5	Canopies for Generator Sheds
6	Balcony/Chajjas.
7	Changes in Outer Gates.

(8) Colourings of plans shall be as under**:-**

S.No.	**Item**	**Site & Building Plan (on white background)**
1	Plot line	Thick Black
2	Building lines	Thin Black
3	Open space	No colour
4	Construction to be approved	Blue filled in
5	Work proposed to be demolished	Yellow filled in
6	Proposed construction	Brown filled in
7	Drainage & sewerage work	Orange dotted
8	Water supply	Green dotted
9	Already approved construction	Orange filled in
10	Revised/Altered building	Pink filled in
11	Fire escapes	Red dotted
12	Any other	Purple dotted

74) APPROVAL OF PLANS (Section 79).-

1) If the Chief Inspector-cum-Facilitator is satisfied that the plans are in consonance with the requirements of the Code, he shall, subject to such conditions as he may specify, approve them in electronic mode by signing digitally within such period not exceeding thirty days.
2) If the Chief Inspector-cum-Facilitator fails to convey approval or rejection or any observation within a period of thirty days of the receipt from any person of an application, the plans shall without prejudice to the provisions of these rules, be deemed to have been approved.

Provided that plans shall not be deemed to have been submitted till such time

as they are resubmitted duly modified and corrected.

Provided further that plans which have been already approved by the Chief Inspector of Factories under The Factories Act 1948 before coming into force of these rules shall be deemed to be approved under these rules.

Appeal against the order of Chief Inspector of Factories shall be to the Administrative Secretary.

75) CERTIFICATE OF STABILITY (Section 79).-

1) No manufacturing process to be carried on with the aid of power shall be begun, or carried on in any building or part of a building until a certificate of stability of the building or part of the building in Form-28 signed digitally by a person possessing the qualifications prescribed in sub-rule has been delivered to and accepted by the Chief Inspector-cum- Facilitator in electronic mode. No extended portion of any factory wherein manufacturing process is being carried on with the aid of power shall be used as a part of the factory any time after the extension, nor plant or machinery shall be added in any factory nor brought into use any time, after such addition until such a certificate in respect of such extension or plan has been delivered to and accepted by the Chief Inspector- cum-Facilitator in electronic mode.

Provided that if on an application for the acceptance of certificate of stability submitted in electronic mode, complete in all respect, to the Chief Inspector-cum- Facilitator and if no response is received within thirty days from the date of such submission, the said application shall be deemed approved.

2) The person competent to certify the plans and specification or to sign digitally Form-28 shall possess the following qualification and experience: -

(i) Degree in Civil or Structural Engineering;

(ii) A minimum of 5 years' experience in the design or construction or testing or repair of structures;

(iii) Knowledge of non-destructive testing, various codes of practices that are current and the effect of the vibrations and natural forces on the stability of the building; and

(iv) Ability to arrive at a reliable conclusion with regard to the safety of the structure or the building.

(v) Age of competent person shall not be above the age of 60 years and

shall be physically fit for the purposed of carrying out the tests, examination and inspection.

3) No person, except in the case of buildings occupied or erected by any Government where a certificate may be granted by an officer not below the rank of Executive Engineer shall be authorized to sign a certificate of stability if he is in the full employment of the owner or the builder of the buildings.

76) **REVOCATION OF SANCTION (Section 79).-** The approval granted under these rules can be revoked by the Chief Inspector-cum-Facilitator, if it is found that such approval has been obtained by the occupier or manager by misrepresentation of material facts or fraudulent document submitted along with the application or otherwise or the construction is not being done in accordance with the approval granted.

77) **INTERNAL HEIGHT OF WORK-ROOMS (section 79).-** (1) The internal height of a work-room shall be not less than 14 feet measured from the floor level to the lowest part of the roof and if the roof is of corrugated iron which is neither covered with tiles nor has an inner ceiling or lining of heat resisting material with an air space of at least four inches between it and the corrugated iron, the internal height shall be not less than 16 feet:

Provided that in the case of building having a brick or concrete roof or a combination of the two, the minimum height may be 12 feet, if approved by the Chief Inspector-cum- Facilitator;

Provided further that in case of factories employing less than 100 workers, the Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, (where no fumes/smoke or dangerous vapours are produced and where the facilities of air conditioning/cooling are provided) exempt such factories from the provision of this sub-rule.

(2) There shall be provided at all times for each person employed in any room of a factory where mechanical or electrical power is used, at least 36 square feet of floor space exclusive of that occupied by machinery and a breathing space of at least 500 cubic feet.

(3) Particulars of each work-room of the factory shall be entered in Form-27 which shall be shown to the Inspector-cum-Facilitator when required. The provisions of sub-rule (1) shall not apply to rooms intended for storage, godowns and like purposes and also rooms intended solely for office purpose where only clerical work is done.

78) **Minimum Dimensions of Manholes.-** Every chamber, tank, vat, pipe, flue or other confined space which persons may have to enter and which may contain dangerous fumes to such an extent as to involve risk of the persons being over- come, thereby shall unless there is other effective means of egress, be provided with a manhole which may be rectangular, oval or circular in shape, and which shall —

(a) in the case of rectangular or oval shape be not less than 16 inches long and 12 inches wide;

(b) in the case of a circular shape, be not less than 16 inches in diameter.

79) **Exits in the Building: -** (1)(a) In this rule:

—horizontal exit‖ means an arrangement which allows alternative egress from a floor area to another floor at or near the same level in an adjoining building or an adjoining part of the same building with adequate separation; and

—travel distance‖ means the distances an occupant has to travel to reach an exit.

(a) An exit may be a doorway, corridor, passageway to an external stairway or to a verandah or to an internal stairway segregated from the rest of building by fire- resisting walls which shall provide continuous and protected means of egress to the exterior of a building or to an exterior open space. An exit may also include a horizontal exit leading to an adjoining building at the same level.

(b) Lifts, escalators and revolving doors shall not be considered as exits for the purpose of this sub-rule.

(c) In every room of a factory, exits sufficient to permit safe escape of the occupants in case of fire or other emergency shall be provided which shall be free of any obstruction.

(d) The exits shall be clearly visible and suitably illuminated with suitable arrangement, wherever artificial lighting is to be adopted for this purpose to maintain the required illumination in case of failure of the normal source of electric supply.

(e) The exits shall be marked in a language understood by the majority of the workers.

(f) Iron rung ladders or spiral staircases shall not be used as main exit staircases.

(g) Fire resisting doors or roller shutters shall be provided at appropriate

places along the escape routes to prevent spread of fire and smoke, particularly at the entrance of lifts or stairs where funnel or flue effect may be created inducing an upward spread of fire.

(h) All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.

(i) Exits shall be so located that the travel distance to reach at least one of them on the floor shall not exceed 30 meters.

(j) In case of those factories where high hazard materials are stored or used, the travel distance to the exit shall not exceed 22.5 meters and there shall be at least two ways of escape from every room, however small, except toilet rooms, so Located that the points of access thereto are out of or suitably shielded from areas of high hazard.

(k) Wherever more than one exit is required for any room, space or floor; exits shall be placed as remote from each other as possible and shall be arranged to provide direct access to separate directions from any point in the areas served.

(l) The unit of exit width used to measure capacity of any exit shall be 50 cm. A clear width of 25 cm shall be counted as an additional half unit. Clear width of less than25 cm shall not be counted for exit width.

(m) Occupants per unit width shall be 50 for stairs and 75 for doors.

(n) For determining the exits required, the occupant load shall be reckoned on the basis of actual number of occupants within any floor area or 10 square meters per person, whichever is more.

(o) There shall not be less than two exits serving every floor area above and below the ground floor, and at least one of them shall be an internal enclosed stairway.

(p) For every building or structure used for storage only, and every section thereof considered separately, shall have access to at least one exit so arranged and located as to provide a suitable means of escape for any person employed therein, and in any such room wherein more than 10 persons may be normally present, at least two separate means of exit shall be available, as remote from each other as practicable.

(q) Every storage area shall have access to at least one means of exit which can be readily opened.

(r) Every exit doorway shall open into an enclosed stairway, horizontal exit on a corridor or passageway providing continuous and protected means

of egress.

(s) No exit doorway shall be less than 100 cm in width, doorways shall be not less than200 cm. in height.

(t) Exit doorways shall open outwards, that is, away from the room but shall

not obstruct the travel along any exit. No door when opened shall reduce the required width of a stairway or landing to less than 90 cm. overhead or sliding doors shall not be installed for this purpose.

(u) An exit door shall not open immediately upon a flight of I stairs. A landing at least

1.5 m x 1.5 m in size shall be j provided in the stairway to each doorway. The level of I landing shall be the same as that of the floor which it serves.

(v) The exit doorways shall be open able from the side which they serve without the use of a key.

(w) Exit corridors and passageways shall be of a width not less than the aggregate required width or exit doorways leading from there in the direction of travel to the exterior.

(x) Where stairways discharge through corridors and passageways the height of the corridors and passageways shall not be less than 240 cm.

(y) A staircase shall not be arranged round a lift shaft unless the latter is totally enclosed by a material having a fire resistance rating not lower than that of the type of construction of the former.

(z) Hollow combustible construction shall not be permitted.

(aa) The minimum width of an internal staircase shall be 100 cm.

(bb) The minimum width of treads without nosing shall be 25 cm for an internal staircase. The treads shall be constructed and maintained in a manner to prevent slipping.

(cc) The maximum height of a riser shall be 19 cm and the number of risers shall be limited to 12 per flight.

(dd) Hand rails shall be provided with minimum height of 100 cm and shall be firmly supported.

(ee) The use of spiral staircase shall be limited to low occupant load and to a building of height of 9 meters, unless they are connected to platform such as balconies and terraces to allow escape or pause. A spiral staircase shall not be less than 300 cm in diameter and have

adequate headroom.

(ff) The width of a horizontal exit shall be same as for the exit doorways.

(gg) The horizontal exit shall be equipped with at least one fire door of self- closing type.

(hh) The floor area on the opposite or refuge side of a horizontal exit shall be sufficient to accommodate occupants of the floor areas served, allowing not less than 0.3 square meters per person. The refuge area shall be provided with exits adequate to meet the requirements of this sub-rule. At Least one of the exits shall lead directly to the exterior or street.

(ii) Where there is difference in level between connected areas for horizontal exit, ramps, not more than 1 in 8 slope shall be provided. For this purpose steps shall not be used.

(jj) Doors in horizontal exits shall be open able at all times.

(kk) Ramps with a slope of not more than 1 in 10 may be substituted for the requirements of staircase. For all slopes exceeding 1 in 10 and wherever the use is such as to involve danger of slipping, the ramp shall be surfaced with non-slipping material.

(ll) In any building not provided with automatic fire alarm a manual fire alarm system shall be provided if the total capacity of the building is over 500 persons, or if more than 25 persons are employed above or below the ground floor, except that no manual fire alarm shall be required in one storey buildings where the entire area is undivided and all parts thereof are clearly visible to all occupants.

(2) The Chief Inspector-cum-Facilitator may, where he is satisfied that the conditions of work are reasonably good, exempt such factories or class of factories from the any provision of sub-rule (1).

80) Application for grant of common licence for factory, industrial premises for beedi & cigar work and for engaging contract worker (Section 74, 79 & 119).-

(1) The employer, who desires to obtain a common license in respect of factory, industrial premises for beedi & cigar work and for engaging contract worker or any combination thereof shall submit to the Chief Inspector-cum-Facilitator an application in electronic mode in Form-29 for the grant of license.

Provided that if on an application for the grant of License submitted in electronic mode, complete in all respect, to the State Government or Chief Inspector-cum- Facilitator and if no response is received within forty five days from the date of such submission, the said application shall be deemed approved.

(2) The responsibility under this rule shall entirely lie with the employer himself.

81) **Grant of licence** (**Section 74, 79 & 119**).- (1) A common license under this rule shall be granted in electronic mode by the Chief Inspector-cum-Facilitator in Form-30 for a period between one year to ten years, as the case may be, on payment of the fees specified in the Schedule there to:

Provided that if an application is made for a period for more than one year, the fee shall be payable as per fees specified in Schedule by multiplying the number of years for which license is applied for.

(2) Every licence granted or renewed shall remain in force up to the 31st of December of the year for which the licence is granted or renewed.

(3) The fee for the grant of a licence shall be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time at the rates given in the Schedule below:—

SCHEDULE

Annual License fee in respect of factory.

Maximum number of workers to be employed on any day during the year.

Quantity of KW Installed (Maximum KW)	**Up to 20**	**From 21 to 40**	**From 41 to 150**	**From 151 to 250**	**From 251 to 500**	**From 501 to 1000**	**From 1001 to 2000**	**From 2001 to 3000**	**From 3001 & above**
	Rs.	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**	**Rs.**
Nil	1500	3000	4500	6000	7500	9000	10500	12000	13500
Upto 10	3000	6000	9000	12000	15000	18000	21000	24000	27000
Above 10but not above 50	4500	9000	13500	18000	22500	27000	31500	36000	40500
Above 50 but not Above100	6000	12000	18000	24000	30000	36000	42000	48000	54000

Above 100 but not above 500	7500	15000	22500	30000	37500	45000	52500	60000	67500
Above 500 but not above 1000	9000	18000	27000	36000	45000	54000	63000	72000	81000
Above 1000 but not above 2000	10500	21000	31500	42000	52500	63000	73500	84000	94500
Above 2000	12000	24000	36000	48000	60000	72000	84000	96000	108000

Provided that in the case of a licence for a factory wherein dangerous operations as specified in the Rules, are carried on, an additional registration fee at the rate of 300 rupees per worker shall be charged.

(4) The annual licence fees in respect of industrial premise for beedi & cigar works and for engagement of contract workers shall be applicable separately, as the case may be, as per 1st row of above said table with respect to number of workers.

(5) On receipt of an application, the Chief Inspector-cum-Facilitator may investigate or cause to be investigated to his satisfaction about the correctness of the facts and particulars furnished in the application and other documents submitted along with it and grant such license.

(6) Where the Chief Inspector-cum-Facilitator is of the opinion that the license shall not be granted, he shall assign the reasons for such rejection and communicate to the applicant electronically.

(7) Any person aggrieved by an order passed under this section by the Chief Inspector-cum-Facilitator under sub-Section 6 of Section 119, may file within thirty days from the date of the order, an appeal electronically to the Administrative Secretary and with such fee notified by the Government which shall be disposed off within sixty days.

82) Amendment of licence (Section 74, 79 & 119).-

1) A licence granted in electronic mode may be amended by the Chief Inspector- cum-Facilitator.

2) A licensee who desires to have his licence amended shall submit an application in Form-29 in electronic mode stating the nature of the

amendment and reasons therefore to the Chief Inspector-cum-Facilitator.

Provided that if on an application for the amendment of the Licence submitted in electronic mode to the Chief Inspector-cum-Facilitator and if no response is received within forty five days from the date of such submission, the said application shall be deemed approved.

3) The fee for the amendment of a licence shall be 300 rupees plus the amount (if any) by which the fee that would have been payable if the licence had originally been issued in the amended form exceeds the fee originally paid for the licence.

4) The employer of a factory, wherein change in the quantity of power or the number of persons employed including contract workers or interstate migrant workers or a change of the name of the employer or contractor as given in the original licence, takes place, shall apply for amendment of the current licence within a month of such change.

Provided that where the occupier of a factory fails to apply for the amendment of the licence as laid down in sub-rule (4), the Chief Inspector-cum-Facilitator may levy an excess fee to the extent of 25 percent of the fee chargeable (as the case may be) for the amendment of the licence.

83) Renewal of licence (Section 74, 79 & 119).-

1) A Licence shall be renewed by the Chief Inspector –cum – Facilitator under section 119 in electronic mode, on payment of the same fee which is charged for the grant of a licence for a period between one year to ten years for which application has been made.

2) Occupier of every factory shall submit application in Form-29 in electronic mode, for the renewal of licence, accompanied by fee paid showing that the renewal fee including additional registration fee wherein dangerous operations are carried on has been deposited, and if the application is so made the premises shall be held to be duly licensed until such date as Chief Inspector-cum-Facilitator renews the licence.

3) Every such application shall be submitted in electronic mode at least 30 days prior to expiry of license period but not before 90 days of such expiry of license.

4) If the application is not made before at least 30 days prior to expiry of licence period, an additional fee equal to 25 percent of the licence fee shall be payable by the licensee:

Provided that Chief Inspector-cum-Facilitator may, if satisfied that the delay was unavoidable and beyond the control of the occupier reduce or remit the payment of the additional fee as he thinks fit.

84) **Procedure on death or disability of licensee** (**Section 74, 79 & 119**).- If a licensee dies or becomes insolvent, the person carrying on the business of such licensee shall not be liable to any penalty under these rules for exercising the powers granted to the licensee by the licence during such time as may reasonably be required to allow him to make an application for the amendment of the licence under the Rules in his own name for the unexpired portion of the original licence.

85) **Payment of fees [Section 74, 79 & 119).-**

1) Fee shall be paid be paid through online mode at departmental portal under the Head of Accounts and manner as prescribed by the State Government from time to time.
2) If an application for the grant, renewal or amendment of licence is rejected, the fee paid shall be refunded to the applicant.

86) **Suspension of factory licence** (**Section 74, 79 & 119**). - The Chief Inspector-cum- Facilitator may after giving the licensee concerned, reasonable opportunity to show cause against the proposed action, suspend any license, if he is satisfied that the license was obtained by the licensee through fraud, or by misrepresentation of facts or any other reason specified and on such suspension of licence the licensee shall not be entitled to the refund of the license fee.

87) **Prohibition of use of premises as factory without valid licence** (**Section 74, 79 & 119**).- Any premises shall not be used as a factory or carry on any manufacturing process in a factory unless a licence has been issued in respect of such premises and the same is in force for the time being:

Provided that if a valid application for grant of licence or renewal of licence has been submitted in electronic mode and the required fee has been paid, the premises shall be deemed to be fully licensed until such date as the Chief Inspector-cum-Facilitator grants or renews the licence or refuses in writing to grant or renew license.

88) **Liability of owner of premises in certain circumstances (Section 80).-**

1) where in any premises separate buildings or floors are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for the provision and maintenance of common facilities and

services.

2) The Chief Inspector-cum-Facilitator may through an order specify the liability of the owner and occupier jointly or separately on receiving the application from the occupier and owner of the premises.

Provided that in case the occupier or owner does not apply for the same. Both occupier and owner shall be liable for the common services and facilities.

3) Where in any premises, independent or self-contained or floors are leased to different occupiers for use as separate factories; the owner of the premises and occupiers of such factories utilizing common facilities shall be liable for any contravention of the provisions of this Code in respect of—

(i) approach roads, drainage, water supply, lighting and sanitation;

(ii) latrines, urinals and washing facilities in so far as the maintenance of the common supply of water for these purposes is concerned;

(iii) fencing of machinery and plant belonging to the owner and not specifically entrusted to the custody or use of an occupier;

(iv) safe means of access to the floors and maintenance and cleanliness of stair cases and common passages;

(v) fire prevention and protection;

(vi) emergency preparedness and response;

(vii) canteens, shelter, rest rooms and crèches;

(viii) hygiene, ventilation, temperature;

(ix) safety and occupational health

(x) maintenance of hoists and lifts; and

(xi) Maintenance of any other common facilities provided in the premises.

4) In respect of the carrying out of the provision of sub-rules of the rule, while computing for the purposes of any of the provisions of this Code the total number of workers employed, the whole of the premises shall be deemed to be a single factory.

89) Dangerous operations (Section 82).-

(1) The following manufacturing processes or operations when carried on in any factory is declared to be dangerous operations under Section 82 of the Code:—

I. Manufacture Of Aerated Water and Processes Incidental Thereto.

II.	Electrolytic Plating Or Oxidation Of Metal Articles By Use Of An Electrolyte Containing Acids, Bases Or Salts Of Metals Such As Chromium, Nickel, Cadmium, Zinc, Copper, Silver, Gold Etc.
III.	Manufacture and Repair of Electric Accumulators.
IV.	Glass Manufacture.
V.	Grinding or glazing of Metals and Processes Incidental thereto.
VI.	Manufacture and Treatment Of Lead And Certain compounds Of Lead
VII.	Generation Of Gas From Dangerous Petroleum
VIII.	Cleaning Or Smoothening, Roughening, Etc. Of Articles, By A Jet Of Sand, Metal Shot, Or Grit Or Other Abrasive, Propelled By A Blast Of Compressed Air Or Steam. (Blasting regulations)
IX.	Liming andTanning Of Raw Hides and Skins And Processes Incidental thereto
X.	Carrying On Of Certain Processes Of lead and Lead Material in Printing Presses and Type Foundries
XI.	Chemical Works.
XII.	Manufacture Of Pottery
XIII.	Compression Of Oxygen And Hydrogen Produced By The Electrolysis Of Water
XIV.	Hand ligand Manipulation Of corrosive Substances
XV.	Manipulation of stone or any other Material containing free Silica
XVI.	Handling And Processing Of asbestos, Manufacture Of Any Article Of Asbestos And Any Other Process Of Manufacture Or Otherwise In Which Asbestos Is Used In Any Form
XVII.	Manufacture Or Manipulation Of Carcinogenic Dye Termediates
XVIII.	Process Of Extracting Oils and Fats From VegetablesAnd animal sources InSolvent Extraction Plants
XIX.	ManufactureOrManipulationOfManganese And Its Compounds
XX.	ManufactureAndManipulationOfDangerous Pesticides
XXI.	Carbon Di sulphide Plants
XXII.	Protection AgainstHazardsOfPoisoning Arising From Benzene
XXIII.	Operations Involving High Noise Levels
XXIV.	Manufacture Of Rayon By Viscose Process
XXV.	Highly FlammableLiquids AndFlammable Compressed Gases
XXVI.	Operation In Foundries

XXVII.	Fire Works Manufactories And Match Factories.
XXVIII.	Use Of Ovens And Driers In Factories
XXIX.	Textile Machinery Except Machinery Use In Jute Mills
XXX.	Process Of Melting In Induction Furnace
XXXI.	Woodworking Machinery
XXXII.	Rubber Mills
XXXIII.	Centrifugal Machines
XXXIV.	Powers Presses
XXXV.	Shears Slitters And Guillotine Machines
XXXVI.	Thermic Fluid Heaters
XXXVII.	Manufacture Of Chromic Acid Or Manufacture Or Recovery Of The Bichromate Of Sodium, Potassium Or Ammonium
XXXVIII.	Welding/Cutting Operation With The Use Of Lpg/Acetylene/Argon
XXXIX.	Effluent Treatment Plant (ETP), Sewage Treatment Plant (STP)
XL.	Processing of Hazardous Wastes

(2) the provisions specified in the Schedules annexed hereto shall apply to any class or description of factories wherein dangerous operations specified in each schedule are carried out.

(3) wherever a periodical medical examination has been prescribed under the different schedules, the occupier shall send a return in Form-34 to the Chief Inspector–cum–Facilitator so as to reach him on or before the 5th of every month in respect of medical examination of the workers conducted during the preceding quarter.

(4) Any register or record of medical examination and tests connected therewith required to be carried out under any of the schedule annexed hereto in respect of any worker shall be made readily available to the Inspector– cum –Facilitator and shall by preserved till the expiry of one year after the worker ceases to be in employment of the factory.

SCHEDULES UNDER RULE 89

Dangerous Operations - Special Provisions

SCHEDULE I

MANUFACTURE OF AERATED WATERS AND PROCESSES INCIDENTAL THERETO

1. **Fencing of machines.** —All machines for filling bottles or syphons shall be so constructed, placed or fenced as to prevent, as far as may be practicable, any fragment of a bursting bottle or syphon from striking any person employed in the factory.

2. **Face-guards and gauntlets.**

(a) The occupier shall provide and maintain in good condition for the use of all persons engaged in filling bottles or syphons: —

(a) suitable face-guard to protect the face, neck and throat, and

(b) suitable gauntlets for both arms to protect the whole hand and arms:

***Provided that:* —**

(i) paragraph 2(1) shall not apply where bottles are filled by means of an automatic machine so constructed that no fragment of a bursting bottle can escape; and

(ii) where a machine is so constructed that only one arm of the bottler at work upon it is exposed to danger, a gauntlet need not be provided for the arm which is not exposed to danger.

(b) The occupier shall provide and maintain in good condition for the use of all persons engaged in corking, crowning, screwing, wiring, foiling, capsuling, sighting or, labeling bottles or syphon's: —

(a) suitable face-guard to protect the face, neck and throat and;

(b) suitable gauntlet for both arms to protect the arms and at least half of the palm and the space between the thumb and fore-finger.

3. **Wearing of face-guards and gauntlets.** —All persons engaged in any of the processes specified in paragraph 2 shall, while at work in such processes wear the face-guards and gauntlets provided under the provisions of the said paragraph.

SCHEDULE- II

ELECTROLYTIC PLATING OR OXIDATION OF METAL ARTICLES BY USE OF AN ELECTROLYTE CONTAINING ACIDS, BASES OR SALTS OF METALS SUCH AS CHROMIUM, NICKEL, CADMIUM, ZINC, COPPER, SILVER, GOLD ETC.

1. **Definitions.** — For the purposes of this Schedule:
   (a) **—Electrolytic‖** means the electrolytic plating or oxidation of metal articles by the use of an electrolyte containing acids, bases or salts of metal such as chromium, nickel, cadmium, zinc, copper, silver, gold, etc.;
   (b) **—Bath‖,** means any vessel used for an electrolytic process or for any subsequent process; and
   (c) **—Employed‖,** means employed in any process involving contact with liquid from a bath.
2. **Exhaust draught.—**an efficient exhaust draught shall be applied to every vessel in which an electrolytic process is carried on. Such draught shall be provided by mechanical means and shall operate on the vapour or spray given off in the process as near as may be at the point of origin. The exhaust draught appliances shall be so constructed, arranged and maintained as to prevent the vapour or spray entering into any room or place in which work is carried on.
3. **Prohibition relating to pregnant women and young persons.—**No pregnant woman, adolescent or child shall be employed or permitted to work at a bath.
4. **Floor of work-rooms.** — The floor of every work-room containing a bath shall be impervious to water. The floor shall be maintained in good and level condition and shall be washed down at least once a day.
5. **Protective devices.—**(1) The occupier shall provide and maintain in good and clean condition the following articles or protective devices for the use of all persons employed on any process at which they are liable to come in contact with liquid from a bath and such devices shall be worn by the person concerned:
   (a) waterproof aprons and bibs; and
   (b) for persons actually working at a bath, loose fitting rubber gloves and rubber boots or other water-proof footwear and chemical goggles.

   (2) The occupier shall provide and maintain for the use of all persons employed suitable accommodation for the storage and drying of protective devices.

6. **Washing facilities.** — (1) There shall be provided and maintained in good repairs for the use of all persons employed in electrolytic process and processes incidental to:

(a) a wash place under cover, with either—

(i) a trough with a smooth impervious surface fitted with a waste pipe, and of sufficient length to allow at least 60 cms. for every 5 persons employed at any one time and having a constant supply of water from taps or jets above the trough at intervals of not more than 60 cms. OR

(ii) at least one washbasin for every five such persons employed at any one time fitted with a waste pipe and having a constant supply of water laid on.

(b) a sufficient supply of clean towels renewed daily and soap or other suitable cleaning material.

(2) In addition to the facility in sub-paragraph (1), an approved type of emergency shower with eye fountain shall be provided and maintained in good working order. Whenever necessary, in order to ensure continuous water supply, storage tank of 1500 liters capacity shall be provided as a source of clean water for emergency use.

7. **Cautionary placard.**—A cautionary placard in the form specified below and printed in the language of the majority of the workers employed shall be affixed in a prominent place in the factory where it can be easily and conveniently read by the workers.

CAUTIONARY NOTICE

Electrolytic Plating —

1. Chemicals handled in this plant are corrosive and poisonous.
2. Smoking, chewing tobacco, eating food or drinking, in this area is prohibited. No food stuff or drink shall be brought in this area.
3. Some of these chemicals may be absorbed through the skin and may cause poisoning.
4. A good wash shall be taken before meals.
5. Protective devices supplied shall be used while working in this area.
6. Spillage of the chemicals on any part of the body or on the floor shall be immediately washed away with water.
7. All workers shall report for the prescribed medical tests regularly to protect their own health.
8.

9. **Medical facilities and records of examinations and tests.-** (1) the occupier of every factory in which electrolytic processes are carried on shall:

(a) employ a qualified medical practitioner for medical surveillance of the workers employed therein whose appointment shall be subject to the approval of the Chief Inspector – cum - Facilitator;

(b) provide to the said medical practitioner all the necessary facilities for the purpose referred to in clause (a); and (c) maintain a sufficient supply of suitable barrier cream, ointment and impermeable waterproof plaster in a separate box readily accessible to the workers and used solely for the purpose of keeping these substances. In case cyanides are used in the bath, the box shall also contain an emergency cyanide kit.

(2) The medical practitioner shall, examine all workers before they are employed in electrolytic processes. Such examination in case of chrome plating shall include inspection of hands, forearms and nose and will be carried out once at least in every fortnight.

(3) The record of the examinations referred to in sub-paragraph (2) shall be maintained in a separate register approved by the Chief Inspector – cum - Facilitator which shall be kept readily available for inspection by the Inspector– cum - Facilitator.

10. **Medical examination by the Certifying Surgeon.—**(1) every worker employed in the electrolytic processes shall be examined by a Certifying Surgeon before his first employment. Such examination shall include x-ray of the chest and:—

(a) in case of chromium plating include examination for nasal sputum perforation and test for chromium in urine;

(b) in case of nickel plating, test for nickle in urine; and

(c) in case of cadmium plating, test for cadmium in urine and 2 micro globulin in urine.

(2) No worker shall be employed in any electrolytic process unless certified fit for such employment by the Certifying Surgeon.

(3) Every worker employed in the electrolytic processes shall be re-examined by a Certifying Surgeon at least once in every year, except in case of the workers employed in cadmium, chromium and nickel plating processes for whom this examination shall be carried out once in every six months. Such re- examination shall, wherever the Certifying

Surgeon considers appropriate, include tests as specified under sub-paragraph (1) excluding the X-ray of the chest which shall not be required normally to be carried out earlier than once in three years.

(4) The Certifying Surgeon after examining a worker shall issue Certificate of Fitness in Form-33 The record of examination and re-examination carried out shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub-paragraphs (1) and (2), including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form-32.

(5) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector– cum - Facilitator.

(6) If at any time the Certifying Surgeon is of the opinion that worker is no longer fit for employment in the electrolytic processes on the ground that continuance therein would involve danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person declared unfit in such circumstances shall be provided with alternate placement facility unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.

(7) No person who has been found unfit to work as said in sub-paragraph (6) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

SCHEDULE III

MANUFACTURE ANDREPAIROF ELECTRIC ACCUMULATORS

1. **Savings.—**this schedule shall not apply to the manufacture or repair of electric accumulators or parts thereof not containing lead or any compound of lead; or to the repair, on the premises, of any accumulator forming part of a stationery battery.

2. **Definitions.—**For the purpose of this Schedule:

(a) **—Lead process‖** means the melting of lead or any material containing lead, casting, pasting, lead burning or any other work including trimming or any other abrading or cutting of pasted plates, involving the use, movement or manipulation of, or contact with, any oxide of Lead.

(b) ―Manipulation of raw oxide of lead‖ means any lead process involving any manipulation or movement of raw oxides of lead other than its conveyance in a receptacle or by means of an implement from one operation to another.

(c) ―Suspension‖ means suspension from employment in any lead process by written certificates in the Health Register in Form-32 signed by the Certifying Surgeon who shall have power of suspension as regards all persons employed in any such process.

3. **Prohibition relating to pregnant women and young persons.**—No pregnant woman or young person shall be employed or permitted to work in any lead process or in any room in which the manipulation of raw oxide of lead or pasting is carried on;

4. **Separation of certain processes.**—each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another, and from any other process:

(a) Manipulation of raw oxide of Lead.

(b) Pasting.

(c) Drying of pasted plates.

(d) Formation with lead burning ―tacking‖ necessarily carried on in connection therewith.

(e) Melting down of pasted plates.

5. **Air space.**—in every room in which a lead process is carried on, there shall be at least 500 cubic feet of air space for each person employed therein, and in computing this air space no height over 12 feet shall be taken into account.

6. **Ventilation.**—every work-room shall be provided with inlets and outlets of adequate size as to secure and maintain efficient ventilation in all parts of the room.

7. **Distance between workers in pasting-room.**—in every pasting room the distance between the center of the working position of any paster and that of the paster working nearest to him shall not be less than five feet.

8. **Floor of work-rooms.**—(1) the floor of every rooms in which a lead process is carried on shall be:—

(a) Of cement or similar material so as to be smooth and impervious to water;

(b) Maintained in sound condition;

(c) Kept free from materials, plant, or other obstruction not required for, or produced in the process carried on in the room.

(a) In all such rooms other than grid casting shops the floor shall be cleaned

daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room,.

(b) In grid casting shops the floor shall be cleaned daily.

(c) Without prejudice to the requirement of sub-paragraphs (1), (2) and (3), where manipulation of raw oxide of lead or pasting is carried on, the floor shall also be:

(i) Kept constantly moist while work is being done;

(ii) provided with suitable and adequate arrangement for drainage;

(iii) Thoroughly washed daily by means of a hose-pipe.

9. Work-benches.—the work-benches at which any lead process is carried on shall:

(a) Have a smooth surface and be maintained in sound condition;

(b) Be kept free from all materials or plant not required for, or produced in the process carried on thereat; and all such work- benches other than those in grid casting shops shall:

(i) be cleaned daily either after being thoroughly damped or by means of a suction cleaning apparatus at a time when no other work is being carried on thereat; and all such work benches in grid casting shops;

(ii) be cleaned daily; and every work-benches used for pasting;

(iii) be covered throughout with sheet lead or other impervious material;

(iv) be provided with raised edges;

(v) be kept constantly moist while pasting is being carried on.

10. Exhaust draught:—the following processes shall not be carried on without the use of an efficient exhaust draught:

(a) Melting of lead or materials containing lead;

(b) Manipulation of raw oxide of lead, unless done in an enclosed apparatus so as to prevent the escape of dust into the work- room;

(c) Pasting;

(d) Trimming, brushing, filling or any other abrading or cutting of pasted plates giving rise to dust;

(e) Lead burning, other than:

(i) —Tacking‖ in the formation room;

(ii) Chemical burning for the making of lead linings for cell cases necessarily carried on in such a manner that the application of efficient

exhaust is impracticable.

Such exhaust draught shall be affected by mechanical means and shall operate on the dust or fume given off as nearly as may be at its point of origin, so as to prevent it entering the air of any room in which persons work.

11. **Fumes and gases from melting pots.**—the products of combustion produced in the heating of any melting -pot shall not be allowed to escape into a room in which persons work.

12. **Container for dross.**—a suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room except when dross is being deposited therein.

13. **Container for lead waste.**—a suitable receptacle shall be provided in every work-room in which old plates and waste material which may give rise to dust shall be deposited.

14.Racks or shelves in drying room.—The racks or shelves provided in any drying room shall not be more than 8 feet from the floor nor more than 2 feet in width; provided that as regards racks or shelves set or drawn from both sides the total width shall not exceed 4 feet.

Such racks or selves shall be cleaned only after being thoroughly damped unless an efficient suction cleaning apparatus is used for this purpose.

15. **Medical examination.**—(a) Every person employed in a lead process shall be examined by the Certifying Surgeon within seven days, preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon once in every calendar month, or at such other intervals as may be specified in writing by the Chief Inspector-cum - Facilitator, on a day of which due notice shall be given to all concerned.

—First employment‖ means first employment in a lead process in the factory or workshop and also re-employment therein in a lead process following any cessation of employment in such process for a period exceeding three calendar months.

(b) A Health Register in Form-32 containing the names of all persons employed in a lead process shall be kept.

(c) No person after suspension shall be employed in a lead process without written sanction from the Certifying Surgeon entered in or attached to the Health Register.

16. **Protective clothing.—**Protective clothing shall be provided and maintained in good repair for all persons employed in—

(a) Manipulation of raw oxide of lead;

(b) Pasting's;

(c) The formation-room; and such clothing shall be worn by the persons concerned.

The protective clothing shall consist of a water-proof apron and water- proof foot-wear and, also as regards persons employed in the manipulation of raw oxide of lead or in pasting head coverings, the head covering shall be washed daily.

17. **Mess-room.—**There shall be provided and maintained for the use of all persons employed in a lead process and remaining on the premises during the meal intervals a suitable mess-room, which shall be furnished with (a) sufficient tables and benches, and

(b) adequate means for warming food.

The mess-room shall be placed under charge of a responsible person, and shall be kept clean.

18. **Cloak-room.—**There shall be provided and maintained for the use of all persons employed in a lead process:—

(a) A cloak-room for clothing put off during working hours with adequate arrangements for drying the clothing if wet. Such accommodation shall be separate from the mess room;

(b) Separate and suitable arrangements for the storage of protective clothing provided under paragraph 16.

19. **Washing facilities.—**there shall be provided and maintained in a clean state and in good repair for the use of all persons employed in a lead process:

(a) Wash place under cover, with either—

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow of at Least two feet for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or

(ii) At least one wash-basin for every five such persons employed at any one time, fitted with a waste-pipe and plug and having a constant supply of water laid on;

(iii) a sufficient supply of clean towels made of suitable materials renewed

daily, which supply in the case of pasters and persons employed in the manipulation of raw oxide of lead shall include a separate marked towels for each such worker; and

(iv) a sufficient supply of soap or other suitable cleaning material and of nail brushes.

(b) There shall in addition be provided means of washing in close proximity to the rooms in which manipulation of raw oxide of lead or pasting is carried on, if required by notice in writing from the Chief Inspector-cum-Facilitator.

20. Time to be allowed for washing. —Before each meal and before the end of the day's work, at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person who has been employed in the manipulation of raw oxide of lead or in pasting:

Provided that *if there be one basin or two feet of trough for each such person this paragraph shall not apply.*

21. Facilities for bathing.—sufficient bath accommodation to the satisfaction of the Chief Inspector-cum-Facilitator shall be provided for all persons engaged in the manipulation of raw oxide of lead or in pasting, and a sufficient supply of soap and clean towels.

22. Foods, drinks, etc., prohibited in work rooms.—No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any work-room in which any lead process is carried on.

SCHEDULE IV

GLASS MANUFACTURE

1. Exemption. —If the Chief Inspector-cum-Facilitator is satisfied in respect of any factory or any class of process, that owing to the special methods of work on the special conditions in a factory or otherwise, any of the requirements of this Schedule can be suspended or relaxed without danger to the persons employed therein, or that the application of this Schedule or any part thereof is for any reasons impracticable, he may by certificate in writing authorize such suspension or relaxation as may be indicated in the certificate for such period and on such conditions as he may think fit.

2. Definitions.-For the purpose of this Schedule:—

(a) **—Efficient exhaust draught‖** means localized ventilation effected by mechanical means, for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric condition usually prevailing) from escaping into the air of any place in which work

is carried on. No draught shall be deemed efficient which fails to remove smoke generated, at the point where such gas, vapour, fume or dust originate.

(b) ―Lead compound‖ means any compound of lead other than galena which, when treated in the manner described below, yields to an aqueous solution of hydrochloric acid, a quantity of soluble lead compound exceeding, when calculated as lead monoxide, five per cent of the dry weight of the portion taken for analysis. The method of treatment shall be as follows:

A weighed quantity of the material which has been dried at 100°C and thoroughly mixed shall be continuously shaken for one hour at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

(c) ―Suspension‖ means suspension from employment in any process specified in paragraph 3 by written certificate in the Health Register in Form-32 signed by the Certifying Surgeon who shall have power of suspension as regards all persons employed in any such process.

3. **Exhaust draught.**—The following processes shall not be carried on except under an efficient exhaust draught or under such other conditions as may be approved by the Chief Inspector-cum-Facilitator:

(a) The mixing of raw materials to form a “batch”.

(b) The dry grinding, glazing and polishing of glass or any article of glass.

(c) All processes in which hydrofluoric acid fumes or ammonical vapours are given off.

(d) All processes in the making of furnace moulds or pots (including the grinding or crushing of used pots).

(e) All processes involving the use of a dry lead compound.

4. **Prohibition relating to pregnant women and young persons.**—No pregnant woman or young person shall be employed or permitted to work in any of

the operation specified in paragraph 3 or at any place where such operations are carried on.

5. **Floors and work-benches.—**The floor and work-benches of every room in which a dry compound of lead is manipulated or in which any process is carried on giving off silica dust shall be kept moist and shall comply with the following requirements:—

The floors shall be:—

(a) of cement or similar material so as to be smooth and impervious to water;

(b) maintained in sound condition; and

(c) cleaned daily after being thoroughly sprayed with water at a time when no other work is being carried on in the room.

The work-benches hall:—

(a) have a smooth surface and be maintained in sound condition; and

(b) be cleaned daily either after being thoroughly damped or by means of a suction cleaning apparatus at a time when no other work is being carried on thereat.

6. **Use of hydrofluoric acid.—**The following provisions shall apply to room in which glass is treated with hydrofluoric acid:—

(a) there shall be inlets and outlets of adequate size so as to secure and maintain efficient ventilation in all parts of the room;

(b) the floor shall be covered with gutta-percha and be tight and shall slope gently down to a covered drain;

(c) the work-places shall be so enclosed in projecting hood that openings required for bringing in the objects to be treated shall be as small as practicable; and

(d) the efficient exhaust draughts shall be so contrived that the gases are exhausted downwards.

7. **Storage and transport of hydrofluoric acid.—**Hydrofluoric acid shall not be stored or transported except in cylinders or receptacles made of lead or rubber.

8. **Blow-pipes—**Every glass blower shall be provided with a separate blow-pipe bearing the distinguishing mark of the person to whom it is issued and suitable facilities shall be readily available to every glass-blower for sterilizing his blow-pipe.

9. **Food, drinks, etc., prohibited in work-rooms.—**No food, drink, pan and supari or tabacco shall be brought into or consumed by any worker in any room or work-place wherein any process specified in paragraph 3 is carried on.

10. **Protective clothing.—**The occupier shall provide, maintain in good repair and keep in clean condition for the use of all persons employed in the processes - specified in paragraph 3 suitable protective clothing, footwear and goggles according to the nature of the work and such clothing, foot-wear, etc., shall be worn by the persons concerned.

11. **Washing facilities.—**There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in the processes specified in paragraph 3.

(a) a wash-place with either—a trough with a smooth impervious surface fitted with a waste pipe, without plug and of sufficient length to allow of at least two feet for every five such persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than 2 feet; or

(i) at least one wash-basin for every five such persons employed at any one time fitted with a waste pipe and plug and having adequate supply of water laid on or always readily available; and

(b) a sufficient supply of clean towel made of suitable material renewed daily with a sufficient supply of suitable cleaning material and of nail brushes; and

(c) a sufficient number of stand pipes with taps—the number and location of such stands pipes shall be to the satisfaction of the Chief Inspector-cum-Facilitator.

12. **Medical examination.—**(a) Every person employed in any process specified in paragraph 3 shall be examined by the Certifying Surgeon within seven days preceding or following the date of his first employment in such process and thereafter shall be examined by the Certifying Surgeon once in every calendar month or at such other intervals as may be specified in writing by the Chief Inspector-cum-Facilitator on a day of which due notice shall be given to all concerned.

(b) A Health Register in Form-32 containing the names of all persons employed in any process specified in paragraph 3 shall be kept.

(c) No person after suspension shall be employed in any process specified in

paragraph 3 without written sanction from the Certifying Surgeon entered in or attached to the Health Register.

SCHEDULE V

GRINDING OR GLAZING OF METALS AND PROCESSES INCIDENTALTHERETO

1. **Definitions.**—For the purposes of this Schedule:—

(a) ―Grindstone‖ means a grindstone composed of natural or manufactured sandstone but does not include a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.

(b) ―Abrasive wheel‖ means a wheel manufactured of bounded emery or similar abrasive.

(c) ―Grinding‖ means the abrasion by aid of mechanical power, of metal by means of a grindstone or abrasive wheel.

(d) ―Glazing‖ means the abrading, polishing or finishing, by aid of mechanical power of metal by means of any wheel, buff, mop or similar appliance to which any abrading or polishing substance is attached or applied.

(e) ―Racing‖ means the turning up, cutting or dressing of a revolving grindstone before it is brought into use for the first time.

(f) ―Hacking‖ means the chipping of the surface of a grindstone by a hack or similar tool.

(g) ―Rodding‖ means the dressing of the surface of a revolving grindstone by the application of a rod, bar or strip of metal to such surface.

Exceptions.—

(1) Nothing in this Schedule apply to any factory in which only repairs are carried on except any part thereof in which one or more persons are wholly or mainly employed in the grinding or glazing of metals.

(2) Nothing in this Schedule except paragraph 4 shall apply to any grinding or glazing metals carried on intermittently and at which no person is employed for more than12 hours in any week.

2. **Relaxation.-** The Chief Inspector-cum-Facilitator may by certificate in writing, subject to such conditions as he may specify therein, relax or suspend any of the provisions of this Schedule in respect of any factory if owing to the special methods of work or otherwise such relaxation or suspensions is practicable without danger to the health or safety of the persons employed.

3. **Equipment for removal of dust.—**No racing, dry grinding or glazing shall be performed without—

(a) a hood or other appliance so constructed, arranged, placed and maintained as substantially to intercept, the dust thrown off;

(b) a duct of adequate size, air tight and so arranged as to be capable of carrying away the dust, which shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and where practicable, with a connection at the end remote from the fan to enable the Inspector to attach thereto any instrument necessary for ascertaining the pressure of air in the said duct; and

(c) a fan or other efficient means of producing a draught sufficient to extract the dust:

Provided that the Chief Inspector-cum-Facilitator may accept any other appliance that is in his opinion, as effectual for the interception, removal and disposal of dust thrown off as a hood, duct and fan would be.

4. **Restriction on employment on grinding operations.—**Not more than one person shall at any time perform the actual process of grinding or glazing upon grindstone, abrasive wheel or glazing appliance:

Provided that this paragraph shall not prohibit the employment of persons in the manipulation of heavy or bulky articles at any such grindstone, abrasive wheel or glazing appliance.

5. **5. Glazing.** — Glazing or other processes, except processes incidental to wet grinding upon a grindstone shall not be carried on in any room in which wet grinding upon a grindstone is done.

6. **6. Hacking and rodding.—** Hacking or rodding shall not be done unless during the process either (a) an adequate supply of water is laid on at the upper surface of grindstone, or (b) adequate appliances for the interception of dust are provided in accordance with the requirements of paragraph 3.

7. **Examination of dust equipment.—**(a) All equipment for the extraction or suppression of dust shall at least once in every six months be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.

(b) A register containing particulars and tests shall be kept in Form-35 and;

8. **Medical examinations.—**(a) Every person employed in any process specified in paragraph 3 shall be examined by the Certifying Surgeon within fourteen

9. days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months.

(b) A Health Register in Form-32 containing the names of all persons employed in any process specified in paragraph 3 shall also be maintained.

(c) No person after suspension shall be employed in any process specified in paragraph 3 without the written sanction of Certifying Surgeon and the same shall be entered in or attached to Health Register.

SCHEDULE VI

MANUFACTURE AND TREATMENT OF LEAD AND CERTAIN COMPOUNDS OF LEAD

1. **Exemptions.—**Where the Chief Inspector – cum Facilitator is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of the persons employed, he may by certificate in writing exempt any factory from all or any of such provisions, subject to such conditions as he may specify therein.

2. **Definitions**.—For the purpose of this Schedule:—

(a) **‗Lead Compound'** means any compound of lead other than galena which, when treated in the manner prescribed below, yields to an aqueous solution of hydrochloric acid, a quantity or soluble lead compound exceeding, when calculated as lead monoxide, 5 per cent of the dry weight of the portion taken for analysis. In the case of prints and similar products and other mixture containing oil or fat the dry weight means the ‗dry weight' of the material remaining after the substance has been thoroughly mixed and treated with suitable solvents to remove oil, fats varnish or other media.

The method of treatment shall be as follows:

A weighted quantity of the material, which has been dried at 100°C and thoroughly mixed, shall be continuously shaken for one hour, at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate.

(b) **Efficient Exhaust draught.**— Means localised ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fumes so as to prevent them (as far as practicable under the atmospheric conditions usually prevailing) from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove smoke generated at the point where such gas, vapour, fumes or dust originate.

3. **Application.—**This schedule shall apply to all the factories or parts of factories in which any of the following operations are carried on:

(a) Work at a furnace where the reduction or treatment of zinc or lead ores is carried on.

(b) The manipulation,treatmentorreductionofashes containing lead, the desilverising of lead or the melting of scrap lead or zinc.

(c) The manufacture of solder or alloys containing more than 10 per cent of lead.

(d) The manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate or silicate of lead. Handling or mixing of lead tetraethyl.

(e) Any other operation involving the use of lead compound.

(f) The cleaning of work-rooms where any of the operations aforesaid are carried on.

4. **Prohibition relating to pregnant women and young persons.—** No

Pregnant woman or young person shall be employed or permitted to work in any of the operations specified in paragraph 3.

5. **Requirements to be observed.—**No person shall be employed or permitted to work in any process involving the use of lead compounds if the process is such that dust or fume from a lead compound is produced therein, or the persons employed therein are liable to be splashed with any lead compound in the course of their employment unless the provisions of paragraphs 6 to 14 are complied with.

6. **Exhaust draught.—**Where dust, fume, gas or vapour is produced in the process, provision shall be made for removing them by means of an efficient exhaust draught so contrived as to operate on the dust, fume, gas or vapour as closely as possible to the point of origin.

7. **Certificate of fitness.—**A person medically examined under paragraph 8 and found fit for employment shall be granted by a Certifying Surgeon a certificate of fitness in Form-33 and such certificate shall be in the custody of the manager of the factory. The certificate shall be kept readily available for inspection by any Inspector and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.

8. **Medical examination. — (**1) The person so employed shall be medically examined by a Certifying Surgeon within 14 days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months, and a record of such examinations

9. shall be entered by the Certifying Surgeon in the special certificate of fitness granted under paragraph 7.

(2) If at any time the Certifying Surgeon is of opinion that any person is no longer fit for employment on the grounds that continuance therein would involve special danger to health, he shall cancel the special certificate of fitness of that person.

(3) No person whose special certificate of fitness has been cancelled shall be employed unless the Certifying Surgeon after re-examination, again certifies him to be fit for employment.

10. **Food, drinks, etc., prohibited in work-rooms.—**No food, drink, pan and supari or tabacco shall be brought into or consumed by any worker in any work- room in which the process is carried on and no person shall remain in any such room during intervals for meals or rest.

11. **Protective clothing.—**Suitable protective overalls and head coverings shall be provided, maintained and kept clean by the factory occupier and such overalls and head coverings shall be worn by the persons employed.

12. **Cleanliness of work-rooms, tools etc.—**The rooms in which the persons are employed and all tools and apparatus used by them shall be kept in a clean state.

13. **Washing facilities.—**(1) The occupier shall provide and maintain for the use of all persons employed suitable washing facilities consisting of—

(a) a trough with a smooth impervious surface fitted with a waste-pipe without plug and of sufficient length to allow at least two feet for every ten persons employed at any one time and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet; or

(b) at least one wash-basin for every ten persons employed at one time ‘ fitted with a waste pipe and plug and having a constant supply of clean water; together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleaning materials and clean towels;

(2) The facilities so provided shall be placed under the charge of a responsible person and shall be kept clean.

14. **Mess-room or canteen.—** The occupier shall provide and maintain for the use of the persons -employed suitable and adequate arrangements for taking their meals. The arrangements shall consist of the use of a room separate from any work- room which shall be furnished with sufficient tables and benches,

15. and unless a canteen serving hot meals is provided, adequate means of warming food. The room shall be adequately ventilated by the circulation of fresh air, shall be placed under the charge of a responsible person and shall be kept clean.

16. **Cloak-room.—** The occupier shall provide and maintain for the use of persons employed, suitable accommodation for clothing not worn during working hours, and for the drying of wet clothing.

SCHEDULE VII

GENERATION OF GAS FROM DANGEROUS PETROLEUM

1. **Prohibition relating to pregnant women and young persons.—**No pregnant woman or young person shall be employed or permitted to work in or shall be allowed to enter any building in which the generation of gas from dangerous petroleum is carried on.

2. **Flame traps.—**The plant for generation of gas from dangerous petroleum and associated piping and fittings shall be fitted with at least two efficient flame traps so designed and maintained as to prevent a flash back from any burner to the plant. One of these traps shall be fitted as close to the plant as possible. The plant and all pipes and valves shall be installed and maintained free from leaks.

3. **Generating building or room.—**All plants for generation of petrol gas from dangerous petroleum erected after the coming into force of the provisions specified in this Schedule, shall be erected outside the factory building proper in a separate well ventilated building (hereinafter referred to as the _generating building‘). In the case of such plant erected before the coming into force of the provisions specified in this Schedule there shall be no direct communication between the room where such plants are erected (hereinafter

referred to as the

_generating room') and the remainder of the factory building. So far as practicable, all such generating rooms shall be constructed of fire-resisting materials.

4. **Fire extinguishers.**—An efficient means of extinguishing petrol fires shall be maintained in an easily accessible position near the plant for generating gas from dangerous petroleum.

5. **Plant to be approved by Chief Inspector.**—Gas from dangerous petroleum shall not be manufactured except in a plant for generating gas, the design and construction of which has been approved by the Chief Inspector – cum- Facilitator.

6. **Escape of [dangerous petroleum]**—Effective steps shall be taken to prevent dangerous petroleum from escaping into any drain or sewer.

7. **Prohibition relating to smoking etc.**—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in the generating room or building or in the vicinity thereof and warning notice in Hindi and in the language understood by the majority of the workers shall be posted in the factory prohibiting smoking and the carrying of matches, fire or naked light or other means of producing a naked light or spark into such room or building.

8. **Access to dangerous petroleum or container.**—No unauthorised person shall have access to any [dangerous petroleum] or to a vessel containing or having actually contained dangerous petroleum.

9. **Electric fittings.**—All electric fitting shall be of flame-proof construction and all electric conductors shall either be enclosed in metal conduits or be lead sheathed.

10. **Construction of doors.**—All doors in the generating room or building shall be constructed to open outwards or to slide and no door shall be locked or obstructed or fastened in such a manner that it cannot be easily and immediately opened from the inside while gas is being generated and any person is working in the generating room of building.

11. **Repair of containers.**—No vessel that has contained dangerous petroleum shall be repaired in generating room or building and no repairs to any such vessel shall be undertaken unless live steam has been blown into the vessel and until the interior is thoroughly steamed out or other equally effective steps have been taken to ensure that it has been rendered free from dangerous petroleum or inflammable vapour.

SCHEDULE–VIII

Cleaning or smoothening, roughening, etc. of articles, by a jet of sand, metal shot, or grit or other abrasive, propelled by a blast of compressed air or steam. (Blasting Regulations)

1. **Definitions.—**For the purpose of this Schedule: —

"Blasting" means cleaning, smoothing, roughening, or removing of any part of the surface of any article by the use as an abrasive of a jet of sand, metal shot or grit or other material, propelled by a blast of compressed air or steam.

"Blasting Enclosure" means a chamber, barrel, cabinet or any other enclosure designed for the performance of blasting therein. **"**

Blasting Chamber" means a blasting enclosure in which any person may enter at any time in connection with any work or otherwise.

"Cleaning of castings" where done as an incidental or supplemental process in connection with the marking of metal castings, means the freeing of the casting from adherent sand or other substance and includes the removal of cores and the general smoothing of a casting, but does not include the free treatment.

2. **Prohibition of sand blasting.—**Sand or any other substance containing free silica shall not be introduced as an abrasive in any blasting apparatus and shall not be used for blasting:

Provided that *this clause shall come into force two years after the coming into operation of this Schedule:*

Provided further that *no woman or young person shall be employed or permitted to work at any operation of sand blasting.*

3. **Precautions in connection with blasting operations.—**(1) Blasting to be done in blasting enclosure and no work other than blasting and any work immediately incidental thereto and clearing and repairing of the enclosure including the plants and appliances situated therein, shall be performed in a blasting enclosure. Every door, aperture and joint of blasting enclosure, shall be kept closed and airtight while blasting is being done therein.

(2) **Maintenance of blasting enclosure.**—Blasting enclosure shall always be maintained in good condition and effective measure shall be taken to prevent dust escaping from such enclosures, and from apparatus connected therewith, into the air of any room.

(3) **Provision of separating apparatus.**—There shall be provided and maintained for and in connection with every blasting enclosure efficient apparatus for separating , so far as practicable, abrasive which has been used

for blasting and which is to be used again as an abrasive, from dust or particles of other materials arising from blasting; and no such abrasive shall be introduced into any blasting apparatus and used for blasting until it has been so separated:

Provided that *this clause shall not apply, except in the case of blasting chambers, on blasting enclosures constructed or installed before the coming into force of this Schedule, if the Chief Inspector cum - Facilitator is of opinion that it is not reasonably practicable to provide such separating apparatus.*

(4). **Provision of ventilating plant.**— There shall be provided and Maintained in connection with every blasting enclosure efficient ventilating plant to extract, by exhaust draught effected by mechanical means, dust produced in the enclosure. The dust extracted and removal shall be disposed of by such method and in such manner that it shall not escape into the air of any room; and every other filtering or settling device situated in a room in which persons are employed other than persons attending to such bag or other filtering or settling, device, shall be completely separated from the general air of that room in an enclosure ventilated to the open air.

(5) **Operation of ventilating plant.—**The ventilating plant provided for the purpose of sub-paragraph (4) shall be kept in continuous operation whenever the blasting enclosure is in use whether or not blasting is actually taking place therein, and in the case of a blasting chamber, it shall be in operation even when any person is inside the chamber for the purpose of cleaning.

4. Inspection and examination.—(1) Every blasting enclosure shall be specially inspected by a competent person at least once in every week in which it is used for blasting. Every blasting enclosure, the apparatus connected therewith and the ventilating plant shall be thoroughly examined and in the case of ventilating plant, tested by a competent person at least once in every month.

(3) Particulars of the result of every such inspection, examination and test shall forthwith be entered in a register and shall be available for inspection by any workman employed in or in connection with blasting in the factory. Any defect found on any such inspection, examination or test shall be immediately reported by the persons carrying out the inspection, examination or test to the occupier, manager or other appropriate person and without prejudice to the foregoing requirements of this Schedule, shall be removed.

5. **Provision of protective helmets, gauntlets & overalls.—**(1) There shall be provided and maintained for the use of all persons who are employed in a blasting chamber whether in blasting or in any work connected therewith or in cleaning such chamber, protective helmets of a type approved by a certificate of the Chief Inspector-cum-Facilitator and every such person shall wear the helmet provided for his use whilst he is in the chamber and shall not remove it until he is outside the chamber.

(2) Each protective helmets shall carry a distinguishing mark indicating the person by whom it is intended to be used and no person shall be allowed or required to wear a helmet not carrying his mark or which has been worn by another person and has not since been thoroughly disinfected.

(3) Each protective helmet when in use shall be supplied with clean and not unreasonably cold air at a rate of not less than six cubic feet per minute.

(4) Suitable gauntlets and overalls shall be provided for the use of all persons while performing blasting or assisting at blasting and every such person shall while so engaged wear the gauntlet and overall provided.

6. **Precautions in connection with cleaning & other work.—**(1)Where any person is engaged upon cleaning of any blasting apparatus or blasting enclosure or of any apparatus of ventilating plant connected therewith or the surroundings thereof or upon any other work in connection with any blasting apparatus or blasting enclosure or with any apparatus or ventilating plant connected therewith so that he is exposed to the risk of inhaling dust which has arisen from blasting. All practical measures shall be taken to prevent such inhalation.

(2) In connection with any cleaning operation referred to in clause 5, and with the removal of dust from filtering or settling devices all practicable measures shall be taken to dispose of the dust in such manner that it does not enter the air of any rooms. Vacuum cleaners shall be provided and used wherever practicable for such cleaning operations.

7. **Storage accommodation for protective wear.-** Adequate and suitable storage accommodation for the helmets, gauntlets and overalls required to be provided by clause 5 shall be provided outside and conveniently near to every blasting enclosure and such accommodation shall be kept clean. Helmets, gauntlets and overalls when not in actual use shall be kept in this accommodation.

8. **Maintenance and cleaning of protective wear.**- All helmets, gauntlets, overalls and other protective devices or clothing's provided and worn for the purposes of this Schedule, shall be kept in good condition and so far as is reasonably practicable shall be cleaned on every week day in which they are used. Where dust arising from the cleaning of such protective clothing or devices is likely to be inhaled, all practicable measures shall be taken to prevent such inhalation. Vacuum cleaners shall, wherever practicable, be used for removing dust from such clothing and compressed air shall not be used for removing dust from any clothing.

9. **Maintenance of vacuum cleaning plant.**- Vacuum cleaning plant used for the purpose of this Schedule shall be properly maintained.

10. **Restrictions in employment of young persons.—** (1) No person under 18 years of age shall be employed in blasting or assisting at blasting or in any blasting chamber or the cleaning of any blasting apparatus or any blasting enclosure or any apparatus or ventilating plant connected therewith or be employed on maintenance or repair work at such apparatus, enclosure or plant.

(2) No person under 18 years of age shall be employed to work regularly within 20 feet of any blasting enclosure unless the enclosure is in a room and he is outside that room where he is effectively separated from any dust coming from the enclosure.

11. **Power to exempt or relax.** (1) If the Chief Inspector-cum-Facilitator is satisfied that in any factory or any class of factory, the use of sand or other substance containing free silica as an abrasive in blasting is necessary for a particular manufacture or process (other than the process incidental or supplemented to making of metal castings) and that the manufacture or process cannot be carried on without the use of such abrasive or that owing to the special condition or special method of work or otherwise any requirement of this Schedule can be suspended either temporarily or permanently, or can be relaxed without endangering the health of the persons employed or that application of any of such requirements is for any reason impracticable or inappropriate, he may, with the previous sanction of the State Government, by an order in writing exempt the said factory or class of factories from such provisions of this Schedule, to such an extent and subject to such conditions and for such period as may be specified in the said order.

(2) Where an exemption has been granted under sub-clause (1), a copy of the order shall be displayed at a notice board at a prominent place at the main entrance or entrances to the factory and also at the place where the blasting is carried on.

SCHEDULE IX

LIMINGANDTANNINGOFRAWHIDESANDSKINS ANDPROCESSES INCIDENTALTHERETO

1.Cautionary notices.—(1) Cautionary notices as to anthrax shall be affixed in prominent place in the factory where they may be easily and conveniently read by the persons employed.

(2) A copy of a warning notice as to anthrax shall be given to each person employed when he is engaged and subsequently, if still employed, on the first day of each calendar year.

(3) Cautionary notices as to the effects of chrome on the skin shall be affixed in prominent positions in every factory in which chrome solutions are used and such notices shall be so placed as to be easily and conveniently read by the persons employed.

(4) Notices shall be affixed in prominent places in the factory stating the position of the _First Aid‘ box or cupboard and the name of the person-in-charge of such box or cupboard.

(5) If any person employed in the factory is illiterate, effective steps shall be taken to explain carefully to such illiterate persons the contents of the notice specified in paragraphs 1, 2 and 4 and if chrome solutions are used in the factory, the contents of the notice specified in sub-paragraph 3.

2. Protective clothing.- The occupier shall provide and maintain in good condition the following articles of protective clothing:

(a) Water proof footwear, leg coverings, aprons and gloves for persons employed in processes involving contact with chrome solutions, including the preparation of such solutions;

(b) Gloves and boots for persons employed in lime yard; and

(c) Protective footwear, aprons and gloves for persons employed in processes involving the handling of hides or skins, other than in processes specified in clauses (a) and (b);

Provided that :

(i) The gloves, aprons, leg coverings or boots, may be of rubber or leather, but the gloves and boots to be provided under sub-clauses (a) and (b) shall be of rubber;

(ii) the gloves may not be provided to persons fleshing by hand or employed in processes in which there is no risk of contact with lime, sodium sulphide or other caustic liquor.

3. **. Washing facilities, mess-room and cloak room.-** There shall be provided and maintained in a clean state and in good repair for the use of all persons employed:

(a) trough with a smooth impervious surface fitted with a waste pipe without plug and of sufficient length to allow at least two feet for every ten persons employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or

(b) at least one wash basin for every ten such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water, together with, in either case, a sufficient supply of nail brushes, soap or other suitable cleaning material, and clean towels; or

(c) a suitable mess-room, adequate for the number remaining on the premises during the meal intervals, which shall be furnished with (1) sufficient tables and benches, and (2) adequate means for warming food and for boiling water. The mess-room shall (1) be separate from any room or shed in which hide or skins are stored, treated or manipulated, (2) be separate from the cloak-room and (3) be placed under the charge of responsible person;

(d) The occupier shall provide and maintain, for the use of all persons employed, suitable accommodation for clothing put off during working hours and another accommodation for protective clothing and shall also make adequate arrangement for drying up the clothing in both the cases, if wet. The accommodation so provided shall be kept clean at all times and placed under the charge of a responsible person.

4. **Food, drinks, etc., prohibited in work-room.—**No food, drink, pan and supari or tobacco shall be brought into or consumed by any worker in any work- room or shed in which hides or skins are stored, treated or manipulated.

5. **First- aid arrangement.-** The occupier shall (a) arrange for an inspection of the hands of all persons coming into contact with chrome solution to be made twice a week by a Medical Officer.

(b) Provide and maintain a sufficient supply of suitable ointment and impermeable waterproof plaster in a box readily accessible to the worker and used solely for the purpose of keeping the ointment and plaster.

SCHEDULE X

CARRYINGON OFCERTAIN PROCESSESOFLEADANDLEADMATERIALIN PRINTINGPRESSESANDTYPEFOUNDRIES

1. **Exemptions.—**Where the Chief Inspector-cum-Facilitator is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of the persons employed, he may by certificate in writing exempt any factory from all or any of such provisions, subject to such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator.

2. **Definitions.—**For the purpose of this Schedule:—

(a) **‗Lead material'** means material containing not less than five per cent of lead;

(b) **‗Lead processes'** means:

(i) the melting of lead or any lead material for casting;

(ii) the recharging of machines with used lead material; or

(iii) any other work including removal of dross from melting pots, cleaning of plungers; and

(iv) manipulation, movement, or other treatment of lead material;

(c) **Efficient Exhaust draught.**—means localised ventilation effected by heat or mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove gas, vapour, fume or dust at the point where they originate.

3. **Exhaust draught—**(1) None of the following process shall be carried on except with an efficient exhaust draught;

(a) melting lead material or slugs;

(b) heating lead material so that vapour containing lead is given off:

Provided that *the aforesaid processes may be carried on without efficient exhaust draught if they are carried on in such a manner as to prevent free escape of gas, vapour, fume or dust into any place in which work is being done or is carried on in electrically—heated and thermostatically controlled melting pots.*

(2) Such exhaust draught shall be effected by mechanical means and so contrived as to operate on the dust, fume, gas or vapour given off as closely as may be at its point of origin.

4. **Prohibition relating to pregnant women and young persons.—**No pregnant woman or young person shall be employed or permitted to work in any lead process.

5. **Separation of certain processes.** —Each of the following processes shall be carried on in such a manner and under such conditions as to secure effectual separation from one another and from any other process:

(a) melting of lead or any lead material;

(b) casting of lead ingots; and

(c) mechanical composing;

6. **Container for dross.—**A suitable receptacle with tightly fitting cover shall be provided and used for dross as it is removed from every melting pot. Such receptacle shall be kept covered while in the work-room near the machine except when the dross is being deposited therein.

7. **Floor of work-room.**—The floor of every work-room where lead process is carried on shall be:

(a) of cement or similar material so as to be smooth and impervious to water;

(b) maintained in sound condition; and

(c) Cleaned daily after being thoroughly damped with water at a time when no other work is being carried on at the place.

8. **Mess-room.--**There shall be provided and maintained, for the use of all persons employed in a lead process and remaining on the premises during the meal intervals a suitable mess-room which shall be furnished with sufficient tables and benches.

9. **Washing facilities.—**There shall be provided and maintained in a clean state and in good repair for the use of all persons employed in a lead process:

(a) a wash place with either:

(i) a trough with a smooth impervious surface fitted with a waste pipe without plug, and of sufficient length to allow at least two feet for every five such person employed at any one time and having a constant supply of water from taps or jets above the trough at intervals of not more than two feet; or

(ii) at least one wash-basin for every such person employed at any one time, fitted with a waste-pipe and plug and having an adequate supply of water laid on or always readily available; and

(b) a sufficient supply of clean towels made of suitable material renewed daily

with a sufficient supply of soap or other suitable cleaning material.

10. **Medical examination.**—(a) Every person employed in a lead process shall be examined by the Certifying Surgeon within 14 days of his first employment in such process and thereafter shall be examined by the Certifying Surgeon at intervals of not more than three months and a record of such examinations shall be entered by the Certifying Surgeon in the special certificate of fitness in Form-33.

(b) A Health Register containing names of all persons employed in any lead process shall be kept in Form-32.

(c) No person after suspension shall be employed in a lead process without the written sanction of the Certifying Surgeon entered in the health register.

11. **Food, drinks, etc, prohibited in work-room.**—No food, drink, pan and supari or tobacco shall be consumed or brought by any worker into any work-room in which any lead process is carried on.

12. **Protective clothing.**—The occupier shall provide to all persons in lead process two full sleeve overalls every year, arrange for their weekly washing and maintain these in a good condition. The persons employed in such a process shall wear these overalls while engaged in such work.

SCHEDULE XI CHEMICAL WORKS PARTI

1. **Application.**—This Schedule shall apply to all manufacture and processes incidental thereto carried on in chemical works.

2. . **Definitions.**—for the purpose of this Schedule:—

(a) **—Chemical works‖** means any factory or such parts of any factory as are listed in Appendix —A‖ to this Schedule;

(b) **—efficient exhaust draught‖** means localised ventilation effected by mechanical or other means for the removal of gas, vapour, fume or dust to prevent it from escaping into the air of any place in which work is carried on;

(c) **—bleaching powder‖** means the bleaching powder commonly called chloride of lime;

(d) **—chlorate‖** means chlorate or perchlorate;

(e) **—caustic‖** means hydroxide of potassium or sodium;

(f) **—chrome process‖** means the manufacture of chromate or bichromate of potassium or sodium, or the manipulation, movement or other treatment of these substances;

(g) **—nitro or amino process‖** means the manufacture of nitro or amino derivatives of phenol and of benzene or its homologous, and the making of explosives with the use of any of these substances;

(h) The term **—permit to work‖** system means the compliances with the procedures laid down under paragraph 20 of Part II;

(i) **—toxic substances‖** means all those substances which when they enter into the human body, through inhalation or ingestion or absorption through skin, in sufficient quantities cause fatality or exert serious affliction of health, or chronic harmful effects on the health of persons exposed to it due to its inherent chemical or biological effects. In respect of substances whose TLV is specified in the Rules exceeding the concentration specified therein would make the substance toxic;

(j) **—emergency‖** means a situation or condition leading to a circumstances or set of circumstances in which there is danger to the life or health of persons or which could result in big fire or explosion or pollution to the work and outside environment, affecting the workers or neighborhood in a serious manner, demanding immediate action;

(k) **—dangerous chemical reactions‖** means high speed reactions, run-away reactions, delayed reactions etc. and are characterised by evolution of large quantities of heat, intense release of toxic or flammable gases or vapours, sudden pressure build-up etc;

(I) **—manipulation‖** means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, handling, using etc;

(m) **—approved personal protective equipment‖** means items of personal protective equipment conforming to the relevant ISI specifications or in the absence of it, personal protective equipment approved by the Chief Inspector-cum-Facilitator of Factories;

(n) **—appropriate personal protective equipment‖** means that when the protective equipment is used by the worker, he shall have no risk to his life or health or body and;

(o) **—confined space‖** means any space by reason of its construction as well as in relation to the nature of the work carried therein and where hazards to the persons entering into or working inside exist or are likely to develop during working.

PART II

GENERALREQUIREMENTS

Applying to all the works in Appendix "D".

1. **House-keeping.—**(1) Any spillage of materials shall be cleaned up before further processing.

(2) Floors, platforms, stairways, passages and gangways shall be kept free of any obstructions.

(3) There shall be provided easy means of access to all parts of the plant to facilitate cleaning.

2. **Improper use of chemicals.—**No chemicals or solvents or empty containers containing chemicals or solvents shall be permitted to be used by workers for any purposes other than in the processes for which they are supplied.

3. **Prohibition on the use of food, etc.**—No food, drink, tobacco, pan or any edible item shall be stored or heated or consumed on or near any part of the plant or equipment.

4. **Cautionary notices and instructions**

(4) In addition to the above cautionary notice, arrangement shall be made to instruct and educate all the workers including illiterate workers about the hazards in the process including the specific hazards to which they may be exposed to, in the normal course of their work. Such instructions and education should also deal with the hazards involved in unauthorised and unsafe practices including the properties of substances used in the process under normal conditions as well as abnormal conditions and the precautions to be observed against each and every hazard. Further, an undertaking from the workers shall be obtained within one month of their employment and for old workers employed, within one month of coming into operation of the rules, to the effect that they have read the contents of the cautionary notices and instructions, understood them and would abide by them. The training and instructions to all workers and all supervisory personnel shall include the significance of different types of symbols and colours used on the

(5) labels stuck or painted on the various types of containers and pipe lines.

5. **Evaluation and provision of safeguards before the commencement of process.—**

(1) Before commencing any process or any experimental work, or any new manufacture covered under **Appendix _A', ,** the occupier shall take all

possible steps to ascertain definitely all the hazards involved both from the actual operations and the chemical reaction including the dangerous chemical reactions. The properties of the raw materials used, the final products to be made, and any by-products derived during manufacture, shall be carefully studied and provisions shall be made for dealing with any hazards including effects on workers which may occur during manufacture.

(2) Information in writing giving details of the process, its hazards and the steps taken or proposed to be taken from the design stage to disposal stage for ensuring the safety as in sub-paragraph (1) above should be sent to the Chief Inspector-cum-Facilitator at the earliest but in no case less than 15 days before commencing manufacture, handling, or storage of any of items covered under **Appendix ‗A', ** whether on experimental basis, or as pilot plant or as trial production, or as large scale manufacture.

(3) The design, construction, installation, operation, maintenance and disposal of the buildings, plants and facilities shall take in consideration effective safeguards against all the safety and health hazards/so evaluated.

(4) The requirement under the sub-paragraphs (1) to (3) shall not act in lieu of or in derogation to, any other provisions contained in any Act governing the work.

6. **Authorised entry.**—Authorised persons only shall be permitted to enter any section of the factory or plant where any dangerous operations or processes are being carried on or where dangerous chemical reactions are taking place or where hazardous chemicals are stored.

7. **Examination of instruments and safety devices.**—(1) All instruments and safety devices used in the process shall be tested before taking into use and after carrying out any repair to them and examined once in a month, by a competent person. Records of such tests and examinations shall be maintained in a register.

(2) All instruments and safety devices used in the process shall be operated daily or as often as necessary, to ensure its effective and efficient working at all times.

8. **Electrical installations.**—All electrical installations used in the process covered in **Appendix ‗A'** shall be of an appropriate type to ensure safety against the hazard prevalent in that area such as suitability against dust, dampness, corrosion, flammability and explosivity, etc. and shall conform to

9. the relevant ISI specifications governing their construction and use for that area.

10. Handling and storage of chemicals.—(1) The containers for handling and storage of chemicals shall be of adequate strength taking into consideration the hazardous nature of the contents. They shall be provided with adequate labeling and colour coding arrangements to enable identification of the containers and their contents indicating the hazards and safe handling methods and shall conform to the respective ISI standards. The instructions given in the label shall be strictly adhered to. Damaged containers shall be handled only under supervision of a knowledgeable and responsible person and spillage shall be rendered innocuous in a safe manner using appropriate means.

(2) The arrangements for the storage of chemicals including charging of chemicals in reaction vessels and containers shall be such as to prevent any risk of fire or explosion or formation of toxic concentration of substances above the limits specified in the Rules.

(3) Without prejudice to the generality of the requirements in sub-paragraph (2) above, the arrangements shall have suitable ventilation facilities and shall enable the maintenance of safe levels in vessels and containers. Such arrangements shall also take into consideration, the type of storage and the capacity of storage and the compatibility requirements of substances with other chemicals stored nearby.

(4) (a) Storage of chemicals and intermediate products, which are highly unstable or reactive or explosive shall be limited to the quantities required for two months use.

(b) Whenever the quantities laid down in the above clauses (a) are to be exceeded, the permission of the Chief Inspector-cum-Facilitator shall be obtained.

(c) Notwithstanding any thing contained in clauses (a) and (b) above, the Chief Inspector-cum-Facilitator of factories may direct any factory carrying out processes covered in **Appendix "A",** to further limit the storage of hazardous substances, to quantities less than two months on consideration of safety.

(5) Standby arrangements equal to the biggest container shall always be available to transfer the toxic substances quickly into the stand by storage facility if any defect develops in any of the container resulting in the release of toxic substances.

(6) Any storage facility constructed using non- metallic material such as Fiberglass,

Reinforced Plastics (FRP), all glass vessels etc., shall have adequate strength

to withstand the stress, if any, exerted by the contents and shall be properly anchored working platforms, access ladders, pipe lines etc. used in such storage facility shall not have any support on the structure of the storage facility and shall be independently supported.

11. Facility for isolation.—The plant and equipment shall be so constructed and maintained as to enable quick isolation of plant or part of plant or equipment, with appropriate indication. One copy of the lay-out plan indicating the isolation facilities shall always be available with the security personnel, the maintenance and the health and safety personnel and these isolation facilities shall be checked for its effectiveness once in a month.

12. Personal protective equipment.—(1)All workers exposed to the hazards in the processes covered by the Schedule shall be provided with appropriate and approved type of personal protective equipment. Such equipment shall be in a clean, sterile and hygienic condition before issue.

(2) The occupier shall arrange to inform, educate and supervise all the workers in the use of personal protective equipment while carrying out the job.

(3) As regards any doubt regarding the appropriateness of any personal protective equipment, the decision of the Chief Inspector-cum-Facilitator will be final.

13. Alarm systems.

(1) Suitable and effective alarm systems giving audible and visible indications, shall be installed at the control room as well as in all strategic locations where process control arrangements are available so as to enable corrective action to be taken before the operational parameters exceed the predetermined safe levels or lead to conditions conducive to an outbreak of fire or explosion to occur. Such alarm systems shall be checked daily and tested every month at least once to ensure its performance efficiency at all times.

(2) The Chief Inspector-cum-Facilitator may direct such systems to be installed in case of plants or processes where toxic materials are being used and spillage or leakage of which may cause wide-spread poisoning in or around the plant.

14. Control of escape of substances into the work atmosphere.—(1) Effective arrangements such as, enclosure, or by pass, or efficient exhaust draught, maintenance of negative pressure, etc. shall be provided in all plants, containers, vessels, sewers, drains, flues, ducts, culverts and buried pipes and equipments to control the escape and spread of substances which are likely to give rise to fire or explosion or toxic hazards during normal working and in the event of accident or emergency.

(2) In the event of the failure of the arrangements for control resulting in the escape of substances in the work atmosphere immediate steps shall be taken to control the process in such manner, that further escape is brought down to the safe level.

(3) The substance that would have escaped into the work atmosphere before taking immediate steps as required in sub-paragraph (2), shall be rendered innocuous by diluting with air or water or any other suitable agent or by suitably treating the substances.

15. Control of dangerous chemical reactions.—Suitable provision, such as automatic and or remote control arrangements, shall be made for controlling the effects of _dangerous chemical reactions‘. In the event of failure of control arrangements automatic flooding or blanketing or other effective arrangements shall come into operation.

16. Testing, examination and repair of plant & equipment.—(1) All parts of plant, equipment and machinery used in the process which in the likely event of their failure may give rise to an emergency situation shall be tested by a competent person before commencing process and retested at an interval of two years after carrying out repairs to it. The competent person shall identify the parts of the plant, equipment and machinery required to be tested as aforesaid and evolve a suitable testing procedure. In carrying out the test as mentioned above in respect of pressure vessels or reaction vessels the following precautions shall be observed, namely:—

(a).before the test is carried out, each vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matters. During the process of cleaning and removal of sludge, if any, all precautions shall be taken against fire or explosion, if such sludge is of pyropheric nature or contains spontaneously combustible chemicals;

(b) as soon as the test is completed, the vessel shall be thoroughly dried internally and shall be clearly stamped with the marks and figures indicating the person by whom testing has been done and the date of test; and

(c) any vessel which fails to pass the test or which for any other reason is found to be unsafe for use shall be destroyed or rendered unusable under intimation to the Chief Inspector-cum-Facilitator.

(2) All parts of plant, equipment machinery which in the likely event of failure may give rise to an emergent situation shall be examined once in a month by the competent person.

(3) Records of testing and examination referred to in paragraphs (1) and (2) shall be maintained as long as that part of the plant, equipment and machinery are in use.

(4) All repair work including alteration, modification and addition to be carried out to the plant, equipment and machinery shall be done under the supervision of a responsible person who shall evolve a procedure to ensure safety and health of persons doing the work. When repairs or modification is done on pipelines, and joints are required to be welded, butt welding of joints shall be preferred. Wherever necessary the responsible person shall regulate the aforesaid work through a ―permit to work system‖.

17. Staging.—(1)All staging that is erected for the purpose of maintenance work

or repair work or for work connected with entry into confined spaces and used in the processes included in Appendix _A', shall be stable, rigid and constructed out of substantial material of adequate strength. Such staging shall conform to the respective Indian Standard specifications.

(2) Staging shall not be erected over a closed or open vessel unless the vessel is so constructed and ventilated to prevent exposure of persons working on the stages.

(3) All the staging constructed for the purpose of this paragraph shall have appropriate access which are safe and shall be fitted with proper hand rails to a height of one meter and the board.

18. Seating arrangements.—The seating arrangements provided for the operating personnel working in processes covered in **Appendix _A'** shall be located in a safe manner as to prevent the risk of exposure to toxic, flammable and explosive substances evolved in the work environment in the course of manufacture, or repair or maintenance, either due to failure of plant and equipment or due to the substances which are under pressure, escaping in the atmosphere.

19. Entry into or work in confined spaces.—(1) The occupier of every factory to which the provisions of this Schedule apply, shall ensure the observance of the following precautions before permitting any person to enter or work inside the confined spaces—

(a) identify all confined -spaces and the nature of hazards that are encountered in such spaces, normally or abnormally and arrange to develop the most appropriate safeguards for ensuring the safety and health of persons entering into or working inside, the confined spaces:

(b) regulate the entry or work inside the confined spaces through a

―permit to work system‖ which should include the safeguards so developed as required under sub-clause (a) above;

(c) before testing the confined space for entry into or work in, the place shall be rendered safe by washing or cleaning with neutralising agents; or purging with steam or inert gases and making adequate forced ventilation arrangements or such measure which will render the confined space safe;

(d) shall arrange to carry out such tests as are necessary for the purpose by a competent person and ensure that the confined space is safe for the persons to enter or work. Such testing shall be carried out as often as is necessary during the course of work to ensure its continued safety,

(e) shall arrange to educate and train the personnel who would be required to work in confined spaces about the hazards involved in the work. He shall also keep in readiness the appropriate and approved personal protective equipment including arrangements for rescue, resurrection and first aid, and shall arrange supervision of the work at all times by responsible and knowledgeable person.

(2) The manager shall maintain a log book of all entry into or work in, confined spaces and such record shall contain the details of persons assigned for the work, the location of the work and such other details that would have a bearing on the safety and health of the persons assigned for this work. The log book so maintained shall be retained as long as the concerned workers are in service and produced to the Inspector when demanded.

20. Maintenance work etc.—(1) All the work connected with the maintenance of plants and equipment including cleaning of empty containers which have held hazardous substances used in the processes covered in this Schedule, shall be carried out under ―permit to work system‖ employing trained personnel and under the supervision of responsible person, having knowledge of the hazards and precautions required to deal with them.

(2). Maintenance work shall be carried out in such a manner that there is no risk to persons in the vicinity or to persons who pass by. If necessary, the place of such work shall be cordoned off or the presence of unconnected persons effectively controlled.

21. Permit to work system.—The permit to work system shall *inter alia* include the observance of the following precautions while carrying out any specified work to be subjected to the permit to work system.

(a) all work subject to the permit to work system is carried out under the

supervision of a knowledgeable and responsible person;

(b) all parts of plant or machinery or equipment on which permit to work system is carried out, shall remain isolated from other parts throughout the period of permit to work and the place of work including the parts of plant, machinery shall be rendered safe by cleaning, purging, washing, etc.

(c) all work subject to the permit to work system shall have predetermined work procedures which integrate safety with the work. Such procedures shall be reviewed whenever any change occurs in material or equipment so that continued safety is ensured;

(d) persons who are assigned to carry out the permit to work system shall be physically fit in all respects taking into consideration the demands and nature, of the work before entering into the confined space. Such persons shall be adequately informed about the correct work procedures as well as the precautions to be observed while carrying out the permit to work system;

(e) adequate rescue arrangements wherever — considered necessary and adequate first- aid, rescue and resurrection arrangement shall be available in good working condition near the place of work while carrying out the permit to work system, for use in emergency;

(f) appropriate and approved personal protective equipment shall be used while carrying out the ―permit to work system‖; and

(g) after completion of work subject to the permit to work system the person responsible shall remove all the equipment and tools and restore to the original condition so as to prevent any danger while carrying out regular process.

22. Safety of sampling personnel.—The occupier shall ensure the safety of persons assigned for collection samples by instructing them on the safe procedures. Such personnel shall be provided with proper and approved personal protective equipment, if required.

23. Ventilation.—Adequate ventilation arrangements shall be provided and maintained at all times in the process area where dangerous or toxic or flammable or explosive substances could be evolved. These arrangements shall ensure that concentrations which are either harmful or could result in explosion, are not permitted to be built up in the work environment.

24. Procedures for meeting emergencies.—(1)The occupier of every factory carrying out the works covered in Appendix ―A‖ shall arrange to identity all types of possible emergencies that could occur in the processes during the course of work or while carrying out maintenance work or repair work. The

emergencies so identified shall be reviewed every year.

(2) The occupier shall formulate a detailed plan to meet all such identified emergencies including arrangements for summoning outside help for rescue and firefighting and arrangements for making available urgent medical facilities.

(3) The occupier shall send the list of emergencies and the details of procedures and plans formulated to meet the emergencies, to the Chief Inspector -cum-Facilitator.

(4) The occupier shall arrange to install distinctive and recognizable warning arrangements to caution all persons inside the plant as well as the neighbouring community, if necessary, to enable evacuation of persons and to enable the observance of emergency procedures by the persons who are assigned emergency duties. All concerned must be well informed about the warning arrangements and their meaning. The arrangements must be checked for its effectiveness every month.

(5) Alternate power supply arrangements shall be made and interlocked with the normal power supply system so as to ensure constant supply of power to the facilities and equipment meant for compliance with requirements of paragraphs 10, 11, 12, 13, 14, 18,22 and this paragraph of Part II, Part III, Part IV and Part V of this Schedule.

(6) The occupier shall arrange to suspend the further process work in a place where emergency is established and shall forthwith evacuate all persons in that area except workers who have been assigned emergency duties.

(7) All the employees of the factory be trained about the action to the taken by them including evacuation procedures during emergencies.

(8) All emergency procedures must be rehearsed every three months and deficiencies, if any, in the achievement of the objections shall suitably be corrected.

(9) The occupier shall arrange to have 10 per cent of the workers trained in the use of first aid, firefighting appliances and in the rendering of specific first aid measures taking into consideration the special hazards of the particular process.

(10). The occupier shall furnish immediately on request the specific chemical identity of the hazardous substances to the treating physician when the information is needed to administer proper emergency or first-aid treatment to exposed persons.

25. Danger due to effluents.—(1) Adequate precautions shall be taken to prevent

the mixing of 1effluents from different processes and operations, which may cause dangerous or poisonous gases to be evolved.

(2) Effluents which contain or give rise in the presence of other effluents to poisonous gases shall be provided with independent drainage systems to ensure that they may be trapped and rendered safe.

PART III

FIREAND EXPLOSIONS RISKS

1. **Sources of ignition including lighting installation.—**(1) No internal combustion engine and no electric motor or other electrical equipment, and fittings and fixtures capable of generating sparks or otherwise causing combustion or any other source of ignition or any naked light shall be installed or permitted to be used in the process area where there could be fire and explosion hazards.

(2) All hot exhaust pipes shall be installed outside a building and other hot pipes or hot surface or surfaces likely to become hot shall be suitably protected.

(3) The classification of work area in terms of its hazards potential and the selection of electrical equipment or other equipment that could constitute a source of ignition shall be in accordance with the respective Indian Standard.

(4) Where a flammable atmosphere may be prevalent or could occur, the soles of footwear worn by workers shall have no metal on them, and the wheels of trucks or conveyors shall be conductive type.

(5) All tools and appliances used for work in this area shall be of non- sparking type.

(6) Smoking in process area where there are risks of fire and explosion shall be prohibited, and warning notices in the language understood by majority of workers shall be posted in the factory prohibiting smoking into specified areas.

2. **Static electricity.—**(1) All machinery and plant, particularly, pipe lines and belt drives, on which static charge is likely to accumulate, shall be effectively earthed/ Receptacles for flammable liquids shall have metallic connections to the earthed supply tanks to prevent static sparking. Where necessary, humidity shall be regulated.

(2) Mobile tanker wagons shall be earthed during filling and discharge and precautions shall be taken to ensure that earthing is effective before such filling or discharge takes place.

3. **Lighting protection.—**Lighting protection arrangement shall be fitted where necessary, and shall be maintained.

4. **Process heating.**—The method of providing heat for a process likely to result in fire and explosion shall be as safe as possible and where the use of naked flame is necessary, the plant shall be so constructed as to prevent any escaping flammable gas, vapour or dust coming into contact with the flame or exhaust gases or other sources likely to cause ignition. Wherever possible, the heating arrangement shall be automatically controlled at a predetermined temperature below the danger temperature.

5. **Leakage of flammable liquids.**—(1)Provision shall be made to confine by means of bund walls, dykes, sumps etc. possible leakages from storage vessels containing flammable Liquids.

(2) Waste material in contact with flammable substances shall be disposed of suitably under the supervision of knowledgeable and responsible persons.

(3) Adequate and suitable fire-fighting appliances shall be installed in the vicinity of such vessels.

6. **Safety valves**—Every still and every closed vessel in which gas is evolved or into which gas is passed, and in which the pressure is liable to rise above the atmospheric pressure, shall have attached to it a pressure gauge, and a proper safety valve or other equally efficient means to relieve the pressure. These appliances shall be maintained in good condition.

7. **Installation of pipeline etc.**—All pipelines carrying flammable or explosive substances shall be protected from mechanical damage and shall be examined by a responsible person once in a week to detect any deterioration or defects, or accumulation of flammable or explosive substances, and record kept of any defects found and repairs made.

8. **Fire fighting systems.**—(1) Every factory employing 500 or more persons and carrying out processes Listed in Appendix ―A‖ shall provide:—

(a).Trained and responsible fire fighting squad so as to effectively handle the fire-fighting and life saving equipment in the event of fire or other emergency. Number of persons in this squad will necessarily depend upon the size of risk involved, but in no case shall be less than 8 such trained persons to be available at any time. The squad shall consist of watch and ward personnel,

fire pump man and departmental supervisors and operators trained in the operation of fire and emergency services.

(b).Squad leaders shall preferably be trained in a recognized government institution and their usefulness enhanced by providing residence on the premises;

(c).Squad personnel shall be provided with clothing and equipment including helmets, boots and belts.

(2) A muster roll showing the duties allocated to each member of the squad shall be prepared and copies supplied to each leader as well as displayed in prominent places so as to be easily available for reference in case of emergency.

(3) The pump man shall be thoroughly conversant with the location of all appliances. He shall be responsible for maintaining all fire-fighting equipment in proper working order. Any defect coming to his notice shall immediately be brought to the notice of squad leader.

(4) As far as is practicable, the fire pump room and the main gate(s) of the factory be connected to all manufacturing or storing areas through telephone inter linked and placed in a convenient location near such areas.

PART IV

RISKS OF TOXIC SUBSTANCES

1. Leakage.—(1) All plants shall be so designed and constructed as to prevent the escape of toxic substance. Where necessary, separate buildings, rooms or protective structure shall be used for the dangerous stages of the process and the buildings shall be so designed as to localize any escape of toxic substances.

(2) Catch pits, bund walls, dykes or other suitable safeguards shall be provided to restrict the serious effects of such leakages. Catch pits shall be placed below joints in pipelines where there is danger involved to maintenance and other workers from such leakage.

2. Drainage.—Adequate drainage shall be provided and shall lead to collection tanks specifically provided for this purpose wherein deleterious material shall be neutralized, treated or otherwise rendered safe before it is discharged into public drains or sewers.

3. Covering of vessels.—(1)Every fixed vessel or structure containing any toxic substance and not so covered as to eliminate all reasonable risk of accidental contact of any portion of the body of a worker, shall be so constructed as to avoid physical contact.

(2) Such vessel shall, unless its edge is at least 90 cms above the adjoining ground or platform be securely fenced to a height of at least 90 cms above such adjoining ground or platform.

(3) Where such vessels adjoin and the space between them clear of any surrounding brick or other work is either less than 45 cms in width or is 45 or more centimeters in width, but is not securely fenced on both sides to a height of at least 90 cms a secure barriers shall be so placed as to prevent passage between

them:

Provided that *sub-paragraph (2) of this paragraph shall not apply to—*

(a) saturators used in the manufacture of sulphate of ammonia; and

(b) that part of the sides of brine evaporating pans which require raking, draining or filing.

4. Continuous exhaust arrangement.—(1)Any process evolving toxic vapour, gas, fume and substance shall have efficient continuous exhaust draught. Such arrangement shall be interlocked in the process control wherever possible.

(2) In the event of failure of continuous exhaust arrangement means shall be provided to automatically stop the process.

5. Work-bench.—All the work-benches used in processes involving the manipulation of toxic substance, shall be graded properly and shall be made of smooth impervious surface which shall be washed daily after the completion of work.

6. Waste disposal.—(1)There shall be provided a suitable receptacle made of non-absorbable material with a tightly fitting cover for depositing waste material soiled with toxic substances and the contents of such receptacles shall be destroyed by burning or using other suitable methods under the supervision of a responsible person.

(2) During the course of manufacture, whenever any batch or intermediate products having toxicity is rejected on consideration of quality, sufficient precautions shall be taken to render them innocuous or otherwise treat them or inactivate them before disposal.

(3) The empty containers of toxic substance shall be cleaned thoroughly before disposal under the supervision of a responsible person.

PART-V

SPECIAL PROVISIONS

1. **Special precautions for nitro or amino processes.—**(1) Unless the crystalized nitro or amino substances or any of its liquor is broken or agitated in a completely enclosed process so as not to give rise to dust or fume, such process shall be carried on under an efficient exhaust draught or by adopting any other suitable means in such a manner as to prevent the escape of dust or fume in the working atmosphere.

(2) No part of the plant or equipment or implements, which was in contact with nitro or amino compounds, shall be repaired, or handled unless they have been emptied and thoroughly cleaned and decontaminated.

(3) Filling of containers with nitro or amino compounds shall be done only by using a suitable scoop to avoid physical contact and the drying of the containers in the stove shall be done in such a manner that the hot and contaminated air from the stove is not drawn into the work-room.

(4) Processes involving the steaming into or around any vessel containing nitro or amino compounds or its raw materials shall be carried out in such a manner that the steam or vapour is effectively prevented to be blown back into the working atmosphere.

(5) Suitable antidotes such as methylene blue injections shall always be available at designated places of work for use during emergency involving the poisoning with nitro or amino compounds.

2. **Special precautions for chrome processes.—**(1)Grinding and sieving of raw materials in chrome processes shall be carried on in such a manner and under such condition as to secure effective separation from any other processes and under an efficient exhaust draught.

(2) There shall be washing facilities located very near to places where wet chrome processes such as bleaching, acidification, sulphate settling, evaporation, crystallisation centrifugation or packing are carried out to enable quick washing of affected parts of body with running water.

(3) Weekly inspection of hands and feet of all persons employed in chrome process shall be done by a qualified nurse and record of such inspections shall be maintained.

(4) here shall be always available at designated places of work suitable ointment such as glycerine, vaseline etc. and water proof plaster in a separate box readily accessible to the workers so as to protect against perforation of nasal sputum.

3. **Special precautions for processes carried out in all glass vessels.**— (1) Processes and chemical reactions such as manufacture of vinyl chloride benzyl chloride etc. which are required to be carried out in all glass vessels shall have suitable means like substantial wire mesh covering to protect persons working nearby in the event of breakage of glass vessel.

(2) Any spillage or emission of vapour from the all glass vessels due to breakage, shall be immediately inactivated or rendered innocuous by suitable means such as dilution with water or suitable solvents so as to avoid the risks of fire or explosion or health hazards.

4. **Special precautions for processes involving chlorate manufacture.**—

(1) Crystallization grinding or packing of chlorate shall not be done in a place used for any other purpose and such places shall have hard, smooth and impervious surface made of non-combustible material. The place shall be thoroughly cleaned daily.

(2) The personal protective equipment like overall etc. provided for the chlorate workers shall not be taken from the place of work and they shall be thoroughly cleaned daily.

(3) Adequate quantity of water shall be available near the place of chlorate process for use during fire emergency.

(4) Wooden vessels shall not be used for the crystallization of chlorate or to contain crystallized ground chlorate.

PART VI
MEDICAL REQUIREMENTS

1. **Decontamination facilities.**—In all places where toxic substances are used in processes listed in Appendix —**A**‖ the following provisions shall be made to meet an emergency:-

(a) fully equipped first-aid box:

(b) readily accessible means of drenching with water persons, parts of body of persons, and clothing of persons who have been contaminated with such toxic and corrosive substances and such means shall be as shown in the Table 1.

No. of persons employed at any time	No. of drenching showers.
Upto 50 Persons	2
Between 51 to 100	3
101 to 200	3+1 for every 50 persons thereafter.
201 to 400	5+1 for every 100 persons thereafter.
401 and above	7+1 for every 200 persons thereafter.

(c) a sufficient number of eye wash bottles filled with distilled water or suitable liquid, kept in boxes or cupboards conveniently situated and clearly indicated by a distinctive sign which shall be visible at all times.

2. Occupational health center:—In all the factories carrying out processes covered in **Appendix —A‖** there shall be provided and maintained in good order an occupational health centre with facilities as per scale laid down here under:—

(1) For factories employing up to 50 workers—

(a) the services of a qualified medical practitioner hereinafter known as Factory Medical Officer, available on a retainer ship basis, in his notified clinic near to the factory for seeking medical help during emergency. He will also carry out the pre-employment and periodical medical examinations as stipulated in paragraph 4 of this part—

(b) A minimum of five persons trained in first-aid procedures, amongst whom at least one shall always be available during the working period.

(c) A fully equipped first-aid box.

(2) For factories employing 51 to 200 workers—

(a) The occupational health center shall have a room having a minimum floor area of 15 sq. m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.

(b) A part-time Factory Medical Officer will be in overall charge of the center who shall visit the factory minimum twice in a week and whose services shall be readily available during emergencies.

(c) There shall be one qualified and trained dresser-cum-compounder on duty throughout the working period.

(d) A fully equipped first-aid box.

(3) For factories employing above 200 workers—

(a) There shall be one full-time Factory Medical Officer for factories

employing up to 500 workers and one more Medical Officer for every 1000 workers or part thereof.

(b) The occupational health center in this case shall have a minimum of two rooms each having a minimum floor area of 15 sq. m. with floors and walls made of smooth, hard and impervious surface and shall be adequately illuminated, ventilated and equipped.

(c) There shall be one trained nurse, one dresser-cum-compounder and one sweeper- cum-ward boy throughout the working period.

(d) The Occupational Health center in this case shall be suitably equipped to manage medical emergencies.

3. Ambulance van.—(1) In every factory carrying out processes covered in **Appendix "A",** there shall be provided and maintained in good condition, a suitably constructed and fully equipped ambulance van as per **Appendix ‗C'** manned by a full time driver-cum- mechanic or a helper, trained in first-aid for the purposes of transportation of serious cases of accidents or sickness unless arrangements for procuring such facility at first notice during emergencies have been made with the nearby hospital or other places. The ambulance van shall not be used for any purpose, other than the purpose stipulated herein and will always be available near the Occupational Health Centre.

(2) The relaxation to procure Ambulance Van from nearby places provided for in sub-paragraph (1) above will not be applicable to factories employing more than 500 workers.

4. Medical examination.—(1) Workers employed in processes covered in **Appendix ‗A'** shall be medically examined by a Factory Medical Officer in the following manner:—

(A).Once before employment, to ascertain physical suitability of the person to do the particular job

(b).Once in a period of 6 months, to ascertain the health status of the workers; and

(c) The details of pre-employment and periodical medical examinations carried out as aforesaid shall be recorded in the prescribed form.

(2) Any findings of the Factory Medical Officer revealing any abnormality or unsuitability of any person employed in the process shall immediately be reported to the Certifying Surgeon who shall in turn, examine the concerned workers and communicate his findings within 30 days. If the Certifying Surgeon is of the opinion that the person so examined is required to be suspended from the process for health protection he will direct the occupier accordingly, who shall not employ the said worker in the same process. However, the person so

suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated:

Provided that *the Certifying Surgeon on his own may examine any other worker whom he feels necessary to be examined for ascertaining the suitability of his employment in the process covered in* ***Appendix "A"*** *or for ascertaining the health status of any other worker and his opinion shall be final.*

(3) No person shall be newly appointed without the Certificate of Fitness granted by the Factory Medical Officer. If the Factory Medical Officer declares a person unfit for being appointed to work in the process covered in **Appendix "A"** such person shall have a right of appeal to the Certifying Surgeon, whose opinion shall be final in this regard.

(4) The worker suspended from the process owing to the circumstances covered in sub- paragraph (2) shall be employed again in the same process only after obtaining the Fitness Certificate from the Certifying Surgeon and after making entries to that effect in the health register.

PART-VII

Additional Welfare Amenities

1. **Washing Facilities.—**(1)There shall be provided and maintained in every factory for the use of all the workers taps for washing, at the rate of one tap for every 15 persons including liquid soap in a container with filling arrangements and nail brushes or other suitable means for effective cleaning. Such facilities shall be conveniently accessible and shall be kept in a clean and hygienic condition.

(2) If washing facilities as required above are provided for women, such facilities shall be separate for them and adequate privacy at all times shall be ensured in such facilities.

2. **Mess-room facilities.—**(1) The occupier of all the factories carrying out processes covered in **Appendix —A‖** and employing 50 workers or more, shall provide for all the workers working in a shift mess-room facilities which are well ventilated and provided with tables and sitting facilities alongwith the provision of cold and hygienic drinking water facilities.

(3) Such facilities shall include suitable arrangements for cleaning and washing and shall be maintained in a clean and hygienic condition.

3. **Cloak-room facilities.—**(1) The occupier of every factory carrying out any process covered in **Appendix "A"** shall provide for all the workers employed in the process cloak-room facilities with lockers. Each worker shall be provided with two lockers, one for work clothing and another separately for personal clothing and the lockers should be such as to enable the keeping of the clothing in a hanging position.

(2) The cloak-room facilities so provided in pursuance of sub-para (1) shall be located as far as possible near to the facilities provided for washing in pursuance of para (1). If it is not possible to locate the washing facilities, the cloak-room facilities shall have adequate and suitable arrangements for cleaning and washing.

4. **Special bathing facilities—** (1)The occupier of any factory carrying out the process covered under **Appendix "B"** shall provide special bathing facilities for all the workers employed and such facilities shall be provided at the rate of 1 for 25 workers and part thereof and shall be maintained in a clean and hygienic condition.

(2) The occupier shall insist all the workers employed in the processes covered in **Appendix "B"** to take bath after the completion of the day's or shift work using the bathing facilities so provided and shall also effectively prevent such of those workers taking bath in any place other than the bathing facilities.

(3) Notwithstanding anything contained in sub-paragraph (1) above, the Chief Inspector-cum-Facilitator may require in writing the occupier of any factory carrying out any other process for which in his opinion bathing facilities are essential from the carrying health point of view, to provide special bathing facilities.

PART-VIII

DUTIES OF WORKERS

(1) Every worker employed in the processes covered in **Appendix "A"** and **Appendix —B‖** shall not make any safety device or appliance or any guarding or fencing arrangement, inoperative or defective and shall report the defective condition of the aforesaid arrangements as soon as he is aware of any such defect.

(2) Before commencing any work, all workers employed in processes covered in **Appendix "A"** shall check their work place as well as the machinery equipment or appliance used in the processes and reports any mal-function or defect immediately to the supervisor or any responsible person of the management.

(3) All workers shall co-operate in all respects with the management while carrying out any work or any emergency duty assigned to them in pursuance of this Schedule and shall always use all the personal protective equipment issued to them in a careful manner.

(4) All workers employed in the processes covered in **Appendix —A‖** or **Appendix —B‖** shall not smoke in the process area or storage area. If special facilities are provided by the management only such facilities should be used.

(5) All workers employed in the processes covered in **Appendix —A‖** shall not remain in unauthorised place or carry out unauthorised work or improvise any arrangements or adopt short-cut method or misuse any of the facilities provided in pursuance of the Schedule, in such a manner as to cause risk to themselves as well as or to others employed.

(6) The workers shall not refuse undergoing medical examination as required under these rules.

PART IX

RESTRICTIONS ON THE EMPLOYMENT OF YOUNG PERSONS AND PREGNANT WOMEN

(1) The Chief Inspector-cum-Facilitator may by an order in writing, restrict or prohibit the employment of pregnant women and young persons, in any of the processes covered in **Appendix A** of this Schedule on considerations of health and safety of women and young persons.

(2) Such persons who are restricted or prohibited from working in the process due to the order issued in pursuance of sub-para (1) above shall be provided with alternate work which is not detrimental to their health or safety.

PART X EXEMPTIONS

1. Power of exemption.—The State Government or subject to the control of the State Government, the Chief Inspector-cum-Facilitator may exempt from the compliance with any of the requirements of this Schedule partly or fully, any factory carrying out processes covered in **Appendix A** if it is clearly and satisfactorily established by the occupier that the compliance with any of the requirements is not necessary to ensure the safety and health of persons employed if suitable and effective alternate arrangements are available to any of the requirements covered in his Schedule.

APPENDIX _A‘:

PROCESSES CARRYINGOUT BY ANY FACTORY‖ WHERE EXEMPTION MAY BE GRANTED FROM THE COMPLIANCE WITH ANYOF THEREQUIREMENTS OF THISSCHEDULE PARTLY OR FULLY BY THE STATE GOVERNMENT OR CHIEF INSPECTOR-CUM- FACILITATOR

Any works or that part of works in which—

(a) the manufacture, manipulation or recovery of any of the following is carried on:

(i) sodium, potassium, iron, aluminum, cobalt, nickel, copper, arsenic, antimony, chromium, zinc, solenium, magnesium, cadmium, mercury, beryllium and their organic and inorganic salts, alloys, oxides and hydroxides;

(ii) ammonia, ammonium hydroxide and salts of ammonium;

(iii) the organic and inorganic compounds of sulphurous, sulphuric, nitric, nitrous, hydrochloric, hydroflouric, hydroiodic, hydro sulphuric,

(iv) hydrobromic, boric;

(v) cyanogen compounds, cyanide compounds, cyanate compounds;

(vi) phosphorusanditscompoundsotherthanorganic phosphorus insecticides;

(vii) chlorine.

(b) hydrogen sulphide is evolved by the decomposition of metallic sulphides, or hydrogensulphide is used in the production of such sulphides;

(c) bleaching powder is manufactured or chlorine gas is produced in chloro- alkali plants;

(d) (i) gas tar or coal tar or bitumen or s hale oil asphalt or any residue of such tar is distilled or is used in any process of chemicals manufacture;

(ii) tar based synthetic colouring matters or their intermediates are produced;

(e) nitric acid is used in the manufacture of nitro compounds;

(f) explosives are produced with the use of nitro compounds;

(g) aliphatic or aromatic compounds or their metallic and non-metallic derivatives or substituted derivatives, such as chloroform, ethylene glycol, formaldehyde, benzyl chloride, phenol, methyle ethyle ketone peroxide, cobalt carbonyl, tungsten carbide etc. are manufactured or recovered.

APPENDIX _B':

CONCERNING SPECIAL BATHING ACCOMODATION IN PURSUANCE OF PARA 4 OF PART VII

1. Nitro or amino processes.
2. All chrome processes.
3. Processes of distilling gas or coal tar or processes of chemical manufacture in which tar is used.
4. Processes involving manufacture manipulation, handling or recovery of cyanogen compound, cyanide compound, cyanate compounds.
5. Processes involving manufacture of bleaching powder or production of chlorine gas in chlor-alkali plants.
6. Manufacture, manipulation or recovery of nickel and its compounds.
7. All processes involving the manufacture, manipulation or recovery of aliphatic or aromatic compounds or their derivatives or substituted derivatives.

APPENDIX _C' AMBULANCE

Ambulance should have the following equipments:—

General—

—A wheeled stretcher with folding and adjusting devices. Head of the stretcher must be capable of being lifted upward;

—Fixed suction unit with equipments;

—Fixed oxygen supply with equipments;

—Pillow witch case;

—Sheets;

— Blankets;

— Towels;

— Emesis bag;

— Bed pan;

— urinal;

— Glass;

— Roll of aluminium foils;

— Soft roller bandage 6" x 5 yards;

— Adhesive tape in 3" roll;

— Safety pins;

— Bandage sheets;

— Burn sheet

Poisoning

—Syrup of ipecea

— Activated charcoal;—Pre-packed in doses

— Snake bite kit;

— Drinking Water

Emergency medicines:

— As per requirement (under the advice of Medical Officer only)

Safety equipment:

— Flares with life of 30 minutes:—

— Flood lights;

— Flash lights;

— Fire extinguisher dry powder type;

— Insulated gauntlet.

Emergency care equipments:—

Resuscitation:

— Portable suction unit;

— Portable oxygen unit;

— Bag-value mask hand operated artificial ventilation unit;

— Airways;

— Mouth gags;

— Tracheotomy adaptors;

— Short spoine board;

—I.V. Fluids with administration unit;

— B.P. Manometer;

— Cugg;

— Stethoscope.

Immobilization:

— Long and short padded boards;

— Wire ladder splints;

— Triangular bandage;

—Long and short spine boards.

Dressings:

— Gauze pads— 4" x 4";

— Universal dressing 10 x 36";

SCHEDULE - XII MANUFACTURE OF POTTERY

1. Definition—For the purposes of this Schedule—

(a) **—pottery‖** include earthen ware, stone ware, procelain, china tile and any other article made from clay or from a mixture containing clay and other materials such as quartz, flint, felspar and gypsum;

(b) **—efficient exhaust draught‖** means localised ventilation effected by mechanical or other means for the removal of dust or fume so as to prevent it from escaping into the air of any place in which work is carried on. No draught shall be deemed efficient which fails to remove effectively dust or fume generated at the point where dust or fume originates;

(c) **—fettling‖** includes scalloping, towing, sand papering, sand sticking, brushing or any other process of cleaning of pottery ware in which dust is given off;

(d) **—leadless glaze‖** which does not contain more than one per cent of its dry weight of a lead compound, calculated as lead monoxide;

(e) **—low solubility glaze‖** means a glaze which does not yield to dilute hydrochloric acid more than five per cent of its dry weight of a soluble lead compound calculated as lead monoxide when determined in the manner described below:

A weighed quantity of the material which has been dried at 100°C and thoroughly mixed shall be continuously shaken for one hour, at the common temperature with 1000 times its weight of an aqueous solution of hydrochloric acid containing 0.25 per cent by weight of hydrogen chloride. This solution shall thereafter be allowed to stand for one hour and then filtered. The lead salt contained in the clear filtrate shall then be precipitated as lead sulphide and weighed as lead sulphate;

(f) **—ground or powered flint or quart‖** does not include natural sands; and

(g) **—potter‘s shop‖** includes all places where pottery is formed by pressing or by any other process and all places where shaping, fettling or other treatment of pottery articles prior to placing for the biscuit fire is carried on.

2. Efficient exhaust draught.- The following processes shall not be carried on without the use of an efficient exhaust draught:

(i) All processes involving the manipulation or use of a dry and unfretted lead compound.

(ii) The fettling operations of any kind, whether on green-ware or biscuit provided that this shall not apply to the wet fettling, and the occasional finishing of the pottery articles without the aid of mechanical power;

(iii) The shifting of clay dust or any other material for making tiles or other articles by pressure, except where—

(a) this is done in a machine so enclosed as to effectively prevent the escape of dust; or

(b) the material to be shifted is so damp that no dust can be given off—

(iv) the processing of tiles from clay dust, an exhaust opening being connected with each press. This sub-clause shall also apply to the pressing from clay dust of articles other than tiles, unless the material is so damp that no dust is given off.

(v) The fettling of tiles made from clay dust by pressure, except where the fettling is done wholly on, or with damp material. This sub-clause shall also apply to the fettling of other articles made from clay dust, unless the material is so damp that no dust is given off.

(vi) The process of loading and unloading of saggars where handling and manipulation of ground and powdered flint, quartz, alumina or other materials are involved.

(vii) The brushing of earthenware biscuit, unless the process is carried on in a room provided with efficient general mechanical ventilation or other ventilation which is certified by the Inspector – cum - Facilitator as adequate, having regard to all the circumstances of the case.

(viii) Fettling of biscuit ware which has been fired in powdered flint or quartz except where this is done in machines so enclosed as to effectively prevent the escape of dust.

(ix) Ware cleaning after the application of glaze by dipping or other process.

(x) Crushing and dry grinding of materials for pottery bodies and saggars, unless carried on in machines so enclosed as to effectively prevent the escape of dust or is so damp that no dust can be given off.

(xi) Sieving or manipulation of powdered flint, quartz, clay grog or mixture of these materials, unless it is so damp that no dust can be given off.

(xii) Grinding of tiles on a power driven wheel unless an efficient water spray is used on the wheel,

(xiii) Lifting and conveying of materials by elevators and conveyers unless they are effectively enclosed and so arranged as to prevent escape of dust into the air in or near any place at which persons are employed.

(xiv) The preparation or weighing out of flow materials, lawning of dry colours, colouring, dusting and colour blowing,

(xv) Mould making, unless the bins or similar receptacles used for holding plaster of pan‘s are provided with suitable covers.

(xvi) The manipulation of calcined material, unless the material has been made and remains so wet that no dust is given off.

3. Separation of processes.—Each of the following processes shall be carried on in such a manner and under conditions so as to secure effectual separation from one another and from other wet processes:—

(a) Crushing and dry grinding or sieving of materials, fettling, pressing of tiles, drying of clay and green ware loading and un- loading saggars.

(b) All processes involving the use of dry lead compound.

4. Use of glaze.—No glaze which is not a leadless glaze or a low solubility glaze shall be used in a factory in which pottery is manufactured.

5. Restriction on employment of pregnant women and young persons.—No pregnant woman or young person shall be employed or permitted to work in any of the operations specified in clause 2 or at any place where such operations are carried on.

6. Potter‘s wheel.—The potter‘s wheel (Jolly and Jigger) shall *be* provided with screens or so constructed as to prevent clay scrapings being thrown off beyond the wheel.

7. Measures to be taken to prevent dust flowing.—(1) All practical measures shall be taken by damping or otherwise to prevent dust arising during cleaning of floor.

(2) Damp saw dust or other suitable material shall be used to render the moist method effective in preventing dust arising into the air during the cleaning process which shall be carried out after work has ceased.

8. Cleaning of floor.—The floors of potter‘s shops, slip houses, dipping houses and ware cleaning rooms shall be hard, smooth and impervious and shall be thoroughly cleaned daily by a moist method by an adult male.

9. Medical examination.—(1) All persons employed in any process included under clause 2 shall be examined by the Certifying Surgeon within 7 days preceding or following the date of their first employment in process; thereafter all persons employed in any process included under clause 2(i) and 2(xiv) shall be examined by the Certifying Surgeon once in every three calendar months, and those employed in any process included in sub-clauses (ii) to (xiii), sub-clause (xv) and (xvi) of clause 2, once in every 12 months by the Certifying Surgeon. Records of such examination shall be entered by the

Certifying Surgeon in the Health Register and certificate of fitness granted to him under clause 10.

(2) If at any time the Certifying Surgeon is of the opinion that any person employed in any process included in clause 2 is no longer fit to continue in the same job, he may ask the management to provide such a person an alternative job and if the Certifying Surgeon is of the opinion that the person so employed is no longer fit for employment even in any other process on the ground that his continuance therein would involve damage to his health, he shall cancel the certificate of fitness granted to that person.

(3) No person whose certificate of fitness has been cancelled shall be re-employed unless the Certifying Surgeon after examining again, certifies him to be fit for employment in the same process or some alternative process.

10. Certificate of fitness.—A person medically examined under clause 9 and found fit for employment shall be granted by the Certifying Surgeon a certificate of fitness in Form- 33 and such certificate shall be in the custody of the manager of the factory. The certificate shall be kept readily available for inspection by an Inspector and the person granted such a certificate shall carry with him, while at work, a token giving reference to such certificate.

11. Protective equipment.—(1) The occupier shall provide and maintain suitable overalls and head coverings for all persons employed in the processes mentioned in clause 2.

(2). The occupier shall provide and maintain suitable aprons of water proof or similar material, which can be sponged daily for the use of the dippers, dippers‘ assistants, throwers, jolly workers, casters, mould makers and filter press and pug mill workers.

(3). Aprons provided in pursuance of sub-clause (2) shall be thoroughly cleaned daily by the wearer by sponging or other wet process. All overalls and head coverings shall be washed, cleaned and mended at Least once a week and this washing, cleaning or mending shall be provided by the occupier.

(4) No person shall be allowed to work in emptying sacks of dusty materials, weighing out and mixing of dusty materials and charging of ball mills and plungers without wearing a suitable and efficient dust respirators.

12. Washing facilities.—The occupier shall provide and maintain in cleanly state and in good repair for the use of all persons employed in any of the processes specified in clause 2, awash place under cover with either:

(a) (i) a trough with smooth impervious surface fitted with a waste pipe, without plug, and of sufficient length to allow at least two feet for every five such persons employed at anyone time, and having a constant supply of clean water from taps or jets above the trough at intervals of not more than two feet; or

(ii) at least one tap or stand pipe for every five such persons employed at any one time having a constant supply of clean water, the tap or stand pipe being spaced not less than 4 feet apart; and

(b) a sufficient supply of clean towels made of suitable materials changed daily with sufficient supply of nail brushes and soap.

13. Time allowed for washing.—Before each meal and before the end of the days work at least ten minutes, in addition to the regular meal times, shall be allowed for washing to each person employed in any of the process mentioned in clause 2.

14. Mess-room.—(1) There shall be provided and maintained for use of all persons remaining within the premises during the rest interval, a suitable mess- room or canteen at a distance of at least 50 feet from the main factory providing a minimum accommodation of 10 square feet per head. The washing facilities mentioned above shall be provided near the mess room or canteen and the mess room and canteen shall be furnished with—

(i) a sufficient number of tables and chairs or benches with back rest;

(ii) arrangements for washing utensils;

(iii) adequate means for warming food;

(iv) adequate quantity of drinking water.

(2) The rooms shall be adequately ventilated by the circulation of fresh air and placed under the charge of a responsible person and shall be kept clean.

15. Food, drink, etc. prohibited in work room.—No food, drink, Pan and Supari, or tobacco shall be brought into or consumed by any worker in any work room in which any of the processes mentioned in clause 2 are carried on and no person shall remain in any such room during intervals for meals or rest.

16. Cloak room etc.—There shall be provided and maintained for the use of all persons employed in any of the processes mentioned in clause 2:

(a) a cloak room for clothing put off during working hours which shall be separate from any mess room;

(b) separate and suitable arrangements for the storage of protective equipment provided under clause 11.

17. Application.—The provisions contained in this Schedule shall not apply to a factory in which any of the following articles, but no other pottery are made—

(a) unglazed or salt glazed bricks and tiles; and

(b) architectural terra-cotta made from plastic clay and either unglazed or glazed with a leadless glaze only.

18. Exemptions.—If in respect of any factory, the Chief Inspector–cum-Facilitator is satisfied that all or any of the provisions of this Schedule are not necessary for the protection of the persons employed in such factory, he may by a certificate in writing exempt such factory, from all or any of such provisions, subject to such conditions as he may specify therein. Such facilities may at any time be revoked by the Chief Inspector– cum - Facilitator without assigning any reasons.

SCHEDULE - XIII

COMPRESSION OF OXYGEN AND HYDROGEN PRODUCED BY THE ELECTROLYSIS OF WATER

1. The room in which electrolysis plant is installed shall be separate from the plant for storing and compressing the oxygen and hydrogen and also the electric generation room—

2. The purity of oxygen and hydrogen shall be tested by a competent person at least once in every shift at the following points:

(i) in the electrolysis room;

(ii) at the gas holder inlet; and

(iii) at the suction end of the compressor.

The purity figures shall be entered in the register and signed by the persons carrying out such tests:

Provided, *however, that if the electrolyser plant is fitted with automatic recorder of purity of oxygen and hydrogen with alarm lights, it shall be sufficient if the purity of the gases is tested at the suction end of the compressor only.*

3. The oxygen and hydrogen gases shall not be compressed, if their purity as determined under clause 2 above falls below 98 per cent at any time.

4. In addition to the limit switch in the gas holder a sensitive negative pressure switch shall be provided in or adjacent to the suction main for hydrogen close to the gas-holder and between the gas holder and the hydrogen compressor to switch off the compressor motor in the event of the gas-holder being emptied to the extent as to cause vacuum.

5. Each gasholder shall be fitted with a low level alarm and a trip switch to stop the compression in the event of the bell of the gasholder reaching within 30 cm from its lowest working level.
6. The water, caustic soda and caustic potash used for making Lye shall be of the standards suitable for electrolysis.
7. Electrical connection at the electrolyser cells and at the electric generator terminals shall be so constructed as to preclude the possibility of wrong connections leading to the reversal of polarity and in addition an automatic device shall be provided to cut off power in the event of reversal of polarity owing to wrong connection either at the switch board or at the electric generator terminals.
8. Oxygen and hydrogen gas pipes shall be painted with distinguishing colours. Whenever any hydrogen pipe is opened for repairs or any other work, on reconnection the pipe shall be purged of all air before hydrogen is allowed to pass through that pipe.
9. All electrical wiring and apparatus in the electrolyser room shall be of flame-proof construction or enclosed in flame proof fittings and no naked light or flame shall be allowed to be taken either in the electrolyser room or where compression and filling of the gases is carried on and such warning notices shall be exhibited in prominent places.
10. No part of eletrolyser plant and the gas holders and compressor shall be subjected to welding, brazing, soldering or cutting until steps have been taken to remove any explosive substance from that part and render the part safe for such operations and after the completion of such operations no explosive substance shall be allowed to enter that part until the metal has cooled sufficiently to prevent risk of explosion.
11. No work of operation, repair or maintenance shall be undertaken except under the direct supervision of a person, who by his training, experience and knowledge of the necessary precautions against risk of explosions is competent to supervise such work. No electric generator after erection or repairs shall be switched on to the eletrolyser unless the same is certified by the competent person under whose direct supervision erection or repairs are carried on to be in a safe condition and the terminals have been checked for the polarity as required by clause 7.
12. Every part of the eletrolyser plant and the gas holder and compressors shall have a regular schedule of overhaul and checking and every defect noticed shall be rectified forthwith.

SCHEDULE XIV

HANDLINGANDMANIPULATIONOFCORROSIVESUBSTANCES

1. **Definition.**—For the purpose of this Schedule:

(a) **—Corrosive operation‖** means an operation of manufacturing, storing, handling, processing, packaging or using any corrosive substance in a factory.

(b) **—Corrosive substance‖** includes sulphuric acid, nitric acid, hydrochloric acid, hydrofluoric acid, carbolic acid, phosphoric acid, liquid chlorine, liquid bromine, ammonia, sodium hydroxide and potassium hydroxide and a mixture thereof, and any other substance which the State Government by notification in the Official Gazette specify to be a corrosive substance.

2. **Flooring.**—The floor of every work room of a factory in which corrosive operation is carried on shall be made of impervious, corrosion and fire resistant material and shall be so constructed as to prevent collection of any corrosive substance. The surface of such flooring shall be smooth and cleaned as often as necessary and maintained in a sound condition.

3. **Protective equipment.**—(a) The occupier shall provide for the use of all persons employed in any corrosive operation, suitable protective wear for hand and feet, suitable aprons, face shields, chemical safety goggles, and respirators. The equipments shall be maintained in good order and shall be kept in clean and hygienic condition by suitably treating to get rid of the ill effects of any absorbed chemicals and by disinfecting. The occupier shall also provide suitable protective creams and other preparations wherever necessary.

(b) The protective equipment and preparations provided shall be used by the persons employed in any corrosive operation.

4. **Water facilities.**—Where any corrosive operation is carried on, there shall be provided as close to the place of such operation as possible, a source of clean water at a height of 210 cms (7 feet) from a pipe of 1.25 cm (1/2) diameter and fitted with a quick acting valve so that in case of injury to the worker by any corrosive substance, the injured part can be thoroughly flooded with water. Whenever necessary, in order to ensure continuous water supply, a storage tank having minimum length, breadth and height of 210 cm, 120 cm, and 60 cm, respectively, or such dimensions as are approved by the Chief Inspector-cum-Facilitator shall be provided as the source of clean water.

5. **Cautionary notice.**—A cautionary notice in the following form and printed in the language which majority of the workers employed understand, shall be

displayed prominently close to the place where any of the operations mentioned in paragraph

2 above is carried out and where it can be easily and conveniently read by the workers. If any worker is illiterate, effective steps shall be taken to explain carefully to him the contents of the notice so displayed.

CAUTIONARY NOTICE

Danger—Corrosive substances cause severe burns and vapours thereof may be extremely hazardous. In case of contact immediately flood the part affected with plenty of water for at least 15 minutes. Get medical attention quickly.

6. Transport.—(a) Corrosive substances shall not be filled, moved or carried except in containers and when they are to be transported, they shall be included in crates of sound construction and of sufficient strength.

(b) A container with a capacity of (11.5 liters) (2½ gallons) or more of a corrosive substance shall be placed in a receptacle or crate and then carried by more than one person at a height below the waist line unless a suitable rubber-wheeled truck is used for the purpose.

(c) Containers for corrosive substances shall be plainly labelled.

7. Devices for handling corrosives.—(a) Suitable tilting or lifting devices shall be used for emptying jars, carboys and other containers of corrosives.

(b) Corrosive substances shall not be handled by bare hands but by means of a suitable scoop or other device.

8. Opening of valves.—Valves fitted to containers holding a corrosive substance shall be opened with a great care. If they do not work freely they shall not be forced open. They shall be opened by a worker suitably trained for the purpose.

9. Cleaning tanks, stills, etc.—(a)In cleaning out or removing residues from stills or other large chambers used for holding any corrosive substances suitable implements, made of wood or other material shall be used to prevent production of arseniurated hydrogen (arsine).

(b) Whenever it is necessary for the purpose of cleaning or other maintenance work for any worker to enter any chamber, tank, vat, pit or other confined space where a corrosive substance had been stored all possible precautions required under the Code, shall be taken to ensure the worker‘s safety.

(c) Whenever possible before repairs are undertaken to any part of equipment in which a corrosive substance was handled, such equipment or

part thereof shall be freed of any adhering corrosive substance by adopting suitable methods.

10. Storage.—(a) Corrosive substances shall not be stored in the same room with other chemicals such as turpentine, carbides, metallic powders and combustible material, the accidental mixing with which may cause a reaction which is either violent or gives rise to toxic fumes and gases.

(b) Pumping or filling over head tanks, receptacles, vats or other containers for storing corrosive substances shall be so arranged that there is no possibility of any corrosive substance over- flowing and causing injury to any person.

(c) Every container having a capacity of 20 Liters or more and every pipe Line, valves and fitting used for storing or carrying corrosive substances shall be thoroughly examined every year for finding out any defects and defects shall be removed forthwith. A register shall be maintained of every such examination made and shall be produced before the Inspector whenever required.

11. Fire extinguishers and fire-fighting equipments.—An adequate number of suitable type of fire extinguishers or other fire-fighting equipments depending on the nature of chemicals stored shall be provided. Such extinguishers or other equipment shall be regularly tested and refilled. Clear instructions as to how the extinguishers or other equipment should be used, printed in the language which majority of the workers employed understand, shall be affixed near each extinguisher or other equipment.

12. Exemption.—If in respect of any factory on an application made by the manager the Chief Inspector-cum-Facilitator is satisfied that owning to the exceptional circumstances, or the infrequency of the process or for any other reason to be recorded by him in writing, all or any of the provisions of this Schedule are not necessary for the protection of the persons employed therein, he may by a certificate in writing which he may at any time revoke, exempt the factory from such of the provisions and subject to such conditions as he may specify therein.

SCHEDULE XV

MANIPULATION OF STONE ORANYOTHERMATERIAL CONTAINING FREE SILICA

1. **Application.**—This Schedule shall apply to all factories or parts of factories in which manipulation of stone or any other material containing free silica is carried on.

2. **Definitions.—** For the purpose of this Schedule.

(a) **—Manipulation‖** means crushing, breaking, chipping, dressing, grinding, sieving, mixing, grading or handling of stone or any other material containing free silica or any other operation involving such stone or material;

(b) **—Stone or any other material containing free silica‖** means a stone or any other solid material containing not less than 5% by weight of free silica.

3. **Precautions in manipulations.**—No manipulation shall be carried out in a factory or part of a factory unless one or more of the following measures, namely:

(a) damping the stone or other material being processed;

(b) providing water spary;

(c) enclosing the process;

(d) isolating the process; and

(e) providing localized exhaust ventilation;

are adopted so as to effectively control the dust in any place in the factory where any person is employed, at a level equal to or below the maximum permissible level for silica dust as laid down in the Rules.

Provided that *such measures as above said are not necessary if the process or operation itself is such that the level of dust created and prevailing does not exceed the permissible level referred to.*

4. **Maintenance of floors.**—(1) All floors or places where fine dust is likely to settle on and whereon any person has to work or pass shall be of impervious material and maintained in such condition that they can be thoroughly cleaned by moist method or any other method which would prevent dust being airborne in the process of cleaning.

(3) The surface of every floor of every work-room or place where any work is carried out or where any person has to pass during the course of his work, shall be cleaned of dust once at least during each shift after sprayed with water or by any other suitable method so as to prevent dust being airborne in the process of cleaning.

5. **Prohibition relating to young persons.**—No young person shall be employed or permitted to work in any of the operations involving manipulation or at any place where such operation are carried out.

6. **Medical facilities and records of examinations and tests.**—(1) The occupier of every factory to which the Schedule applies, shall:

(a) employ a qualified medical officer for medical surveillance of the workers employed therein whose employment shall be subject to the approval of the Chief Inspector-cum-
Facilitator; and

(b) provide to the said medical officer all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examination and appropriate tests carried out by the said medical officer shall be maintained in a separate register approved by the Chief Inspector –cum- Facilitator, which shall be kept readily available for inspection by the Inspector.

7. **Medical examination by Certifying Surgeon.**—(1) Every worker employed in the processes specified in paragraph 1, shall be examined by a Certifying Surgeon within 15 days of his first employment. Such medical examination shall include pulmonary function tests, and chest X-ray. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(2) Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every 12 months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests as specified in sub- paragraph (1) except X-ray which will be once in 3 years.

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33 The records of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manger of the factory. The record of each examination carried out under sub- paragraphs (1) and (2) including the nature and the results of the tests, shall also be entered by the Certifying Surgeon in a health register in Form-32.

(4) The Certificate of Fitness and the health register shall be kept available for inspection by the Inspector.

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance

therein would involve special danger to the health of the workers, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for work in the said processes. The person so suspended from the process shall be provided with alternate placement facilities unless he is fully incapacitated in the opinion of the Certifying Surgeon, in which case the person affected shall be suitably rehabilitated.

8. **Exemptions.—**If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or any other reason, all or any of the provisions of this Schedule is not necessary for protection of the worker in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may in his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, he may specify therein.

SCHEDULE XVI

HANDLING AND PROCESSING OFASBESTOS, MANUFACTURE OF ANY ARTICLE OF ASBESTOS AND ANY OTHER PROCESS OF MANUFACTURE OR OTHERWISE IN WHICH ASBESTOS IS USED IN ANY FORM

1. **Application.—**This Schedule shall apply to all factories or parts of factories in which any of the following processes is carried on:

(a) breaking, crushing, disintegrating, opening, grinding, mixing or sieving of asbestos and other processes involving handling and manipulation of asbestos incidental thereto;

(b) all processes in the manufacture of asbestos textiles including preparatory and finishing processes;

(c) making of insulation slabs or sections, composed wholly or partly of asbestos, and processes incidental, thereto;

(d) making or repairing of insulating mattresses, composed wholly or partly of asbestos and processes incidental thereto;

(e) manufacture of asbestos cardboard and paper; (f) manufacture of asbestos cement goods;

(g) application of asbestos by spray method;

(h) sawing, grinding, turning, abrading and polishing in dry state of articles composed wholly or partly of asbestos;

(i) cleaning of any room, vessel, chamber, fixture or appliance for the collection

of asbestos dust; and

(j) any other processes in which asbestos dust is given off into the work environment.

2. Definition.—For the purpose of this Schedule:

(a) **—asbestos‖** means any fibrous silicate mineral and any admixture containing actiolite, amostite, anthophyllite, drysolite, crocidolite, tremolite or any mixture thereof, whether crude, crushed or opened;

(b) **—asbestos textiles‖** means yarn or cloth composed of asbestos or asbestos mixed with any other materials,

(c) **—Approved‖** means approved for the time being in writing byte Chief Inspector-cum- Facilitator.

(d) **—breathing apparatus‖** means a helmet or face piece with necessary connection by means of which a person using it breathes air free from dust, or any other approved apparatus,

(e) **—efficient exhaust draught‖** means localised ventilation by mechanical means for the removal of dust so as to prevent dust from escaping into air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to control dust produced at the point where such dust originates,

(f) **—preparing‖** means crushing, disintegrating, and any other processes in or incidental to the opening of asbestos,

(g) **—protective clothing‖** means overalls and head covering which (in either case) will when worn exclude asbestos dust.

3. Tools and equipment.—Any tools or equipment used in process to which this Schedule applied shall be such that they do not create asbestos dust above the permissible limit or are equipped with efficient exhaust draught.

4. Exhaust draught.—(1) An efficient exhaust draught shall be provided and maintained to control dust from the following processes and machines:

(a) manufacture and conveying machinery, namely—

(i) preparing, grinding or dry mixing machines;

(ii) carding, card waste and ring spinning machines, and looms;

(iii) machines or other plant fed with asbestos; and

(iv) machines used for the sawing, grinding, turning, drilling, abrading or polishing in the dry state, of articles composed wholly or partly of asbestos;

(b) cleaning and grinding of the cylinders or other parts of a carding machine;

(c) chambers, hopper or other structures into which loose asbestos is delivered or passes;

(d) work-benches for asbestos waste sorting or for other manipulation of asbestos by hand;

(e) work places at which the filling or emptying of sacks, skips or other potable containers, weighing or other process incidental thereto which is effected by hand, is carried on;

(f) sack cleaning machines;

(g) mixing and blending of asbestos by hand; and

(h) any other process in which dust is given off into the work environment.

(2) Exhaust ventilation equipment provided in accordance with sub-paragraph (1) shall, while any work of maintenance of repair to the machinery, apparatus or other plant or equipment in connection with which it is provided is being carried on, be kept in use so as to produce an exhaust draught which prevents the entry of asbestos dust into the air of any work places.

(3) Arrangements shall be made to prevent asbestos dust discharged from exhaust apparatus being drawn into the air of any work room.

(4) The asbestos bearing dust removed from any work room by the exhaust system shall be collected in suitable receptacles or filter bags which shall be isolated from all work areas.

5. Testing and examination of ventilating systems. —(1) All ventilating systems used for the purpose of extracting or suppressing dust as required by this Schedule shall be examined and inspected once every week by a responsible person. It shall be thoroughly examined and tested by a competent person once in every period of 12 months. Any defects found by such examination or test shall be rectified forthwith.

(2) A register containing particulars of such examination and tests and the state of the plant and the repair or alterations (if any) found to be necessary shall be kept and shall be available for inspection by an Inspector.

6. Segregation in case of certain process.—Mixing or blending by the hand of asbestos, or making or repairing of insulating mattresses composed wholly or partly of asbestos shall not be carried on in any room in which any other work is done.

7. Storage and distribution of loose asbestos—(1)All loose asbestos shall, while not in use, be kept in suitable closed receptacles which prevent the escape of asbestos dust therefrom.

(2) Such asbestos shall not be distributed within a factory except in such receptacles or in a totally by enclosed system of conveyance.

8. Asbestos sacks.—(1) All sacks used as receptacles for the purpose of transport of asbestos within the factory shall be constructed of impermeable material and shall be kept in good repair.

(2) A sack which has contained asbestos shall not be cleaned by hand beating but by a machine, complying with paragraph 3.

9. Maintenance of floors and work places.—(1) In every room in which any of the requirements of this Schedule apply—

(a) the floors, work-benches, machinery and plant shall be kept in a clean state and free from asbestos debris and suitable arrangements shall be made for the storage of asbestos not immediately required for use; and

(b) the floors shall be kept free from any material, plant or other articles not immediately required for the work carried on in the room, which would obstruct the proper cleaning of the floor.

(2) The cleaning as mentioned in sub-rule (1) shall, so far as is practicable, be carried out by means of vacuum cleaning equipment so designed and constructed and so used that asbestos dust neither escapes nor is discharged into the air of any work place.

(3) When the cleaning is done by any method other than that mentioned in sub-paragraph (2), the person doing cleaning work and any other person employed in that room shall be provided with respiratory protective equipment and protective clothing.

(4) The vacuum cleaning equipment used in accordance with provisions of sub-paragraph

(2) shall be properly maintained and after each cleaning operation, its surfaces kept in a clean state and free from asbestos waste and dust.

(5) Asbestos waste shall not be permitted to remain on the floors or other surfaces at the work place at the end of the working shift and shall be transferred without delay to suitable receptacles. Any spillage of asbestos waste occurring during the course of the work at any time shall be removed and transferred to the receptacles maintained for the purpose without delay.

10. Breathing apparatus and protective clothing.—(1) An approved breathing apparatus and protective clothing shall be provided and maintained in good conditions for use of every person employed :

(a) in chambers containing loose asbestos;

(b) in cleaning, dust settling or filtering chambers or apparatus;

(c) in cleaning the cylinders, including the doffer cylinders, or other parts of a carding machine by means of hand-stickles; and

(d) in filling, beating, or levelling in the manufacture or repair of insulating mattresses; and

(e) in any other operation or circumstances in which it is impracticable to adopt technical means to control asbestos dust in the work environment within, the permissible limit.

(2) Suitable accommodation in conveniently accessible position shall be provided for the use of persons when putting on or taking off breathing apparatus and protective clothing provided in accordance with this rule and for the storage, of such apparatus and clothing when not in use.

(3) All breathing apparatus and protective clothing when not in use shall be stored in the accommodation provided in accordance with sub-rule (2) above.

(4) All protective clothing in use shall be dedusted under an efficient exhaust draught or by vacuum cleaning and shall be washed at suitable intervals. The cleaning schedule and procedure should be such as to ensure the efficiency in protecting the wearer.

(5) All breathing apparatus shall be cleaned and disinfected at suitable intervals and thoroughly inspected once every month by a responsible person.

(6) A record of cleaning and maintenance and of the condition of the breathing apparatus shall be maintained in register provided for that purpose which shall be readily available for inspection by an Inspector.

(7) No person shall be employed to perform any work specified in sub-paragraph

(1) for which breathing apparatus is necessary to be provided under that sub-paragraph unless he has been fully instructed in the proper use of that equipment.

(8) No breathing apparatus provided in pursuance of sub-paragraph (1) which has been worn by a person shall be worn by another person unless, it has been thoroughly cleaned and disinfected since last being worn and the person has been fully instructed in the proper use of that equipment.

11. Separate accommodation for personal clothing—A separate accommodation shall be provided in a conveniently -accessible position for all persons employed in operations to which -this Schedule applies for storing of personal clothing. This should be - separated from the accommodation provided under sub-paragraph (2) to prevent contamination of personal clothing.

12. Washing and bathing facilities.—(1) There shall be provided and maintained in a clean state and in good repair for the use of all workers employed in the processes covered by the Schedule, adequate washing and bathing places having a constant supply of water undercover at the rate of one such place for every 15 persons employed.

(2) The washing places shall have stand pipe placed at intervals of not less than one meter.

(3) Not less than one-half of the total number of washing places shall be provided with bathrooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided;

Provided that *such towels shall be supplied individually for each worker if so ordered by the Inspector.*

(5) Sufficient supply of soap and nail brushes shall be provided.

13. Mess room.

(1) There shall be provided and maintained for the use of all workers employed in the factory covered by this Schedule, remaining on the premises during the rest intervals, a suitable mess room which shall be furnished with:—

(a) sufficient tables and benches with back rest, and

(b) adequate means for warming food.

(2) The mess room shall be placed under the charge of a responsible person and shall be kept clean.

14. Prohibition of employment of young persons.—No young person shall be employed in any of the process covered by this schedule.

15. Prohibition relating to smoking.—No person shall smoke in any area where processes covered by this Schedule are carried on. A notice in the language understood by majority of the workers shall be pasted in the plant prohibiting smoking at such areas.

16. Cautionary Notice.—(1) Cautionary notice shall be displayed at the approaches and along the perimeter of every asbestos processing area to warn all persons regarding—

(a) hazards to health from asbestos dust;

(b) need to use appropriate protective equipment; and

(c) prohibition of entry to unauthorised persons, or authorised persons but without protective equipment.

(2) Such notice shall be in the Language understood by the majority of the workers.

17. Air monitoring.—To ensure the effectiveness of the control measures, monitoring of asbestos fiber in the air shall be carried out once at least in every shift and the record of the result so obtained shall be entered in a register specially maintained for the purpose.

18. Medical facilities and records of medical examinations and tests.—(1) The occupier of every factory or part of the factory to which the Schedule applies, shall—

(a) employ a qualified medical practitioner for medical surveillance of the workers covered by this Schedule whose employment shall be subject to the approval of the Chief Inspector-cum-Facilitator, and

(b) provide to the said medical practioner all the necessary facilities for the purpose referred to in clause (a).

(2) The record of medical examinations and appropriate tests carried out by the said medical practitioner shall be maintained in a separate register approved by the Chief Inspector-cum-Facilitator, which shall be kept readily available for inspection by the Inspectors.\

19. Medical examination by Certifying Surgeon.—(1) Every worker employed in the processes specified in paragraph 1 shall be examined by a Certifying Surgeon within 15 days of his first employment. Such examination shall include pulmonary function tests, tests for detecting asbestos fibers in sputum and chest X-ray. No worker shall be allowed to work after 15 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(2) Every worker employed in the process referred to sub-paragraph (1) shall be re- examined by a Certifying Surgeon at least once in every twelve calendar months. Such examination shall, wherever the Certifying Surgeon considers appropriate, include all the tests specified in sub-paragraph (1) except chest X- ray which will be carried out once in 3 years.

(3) The Certifying Surgeon after examining a worker, shall issue a Certificate of Fitness in Form-33 The record of examination and re-examinations carried out shall be entered in the certificate and the certificate shall be kept in the custody of the manager of the factory. The record of each examination carried out under sub- paragraph (1) and (2), including the nature and the result of the Certifying Surgeon in a health register in Form-32.

(4) The Certificate of Fitness and the health register shall be kept readily available for inspection by the Inspector.

(5) If at any time the Certifying Surgeon is of the opinion that a worker is no longer fit for employment in the said processes on the ground that continuance therein would involve special danger to the health of the worker, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in those documents should also include the period for which he considers that the said person is unfit to work in the said processes.

(6) No person who has been found unfit to work as said in sub-paragraph (5) shall be re-employed or permitted to work in the said processes unless the Certifying Surgeon, after further examination, again certifies him fit for employment in those processes.

20. Exemption.—If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this Schedule is not necessary for protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing, which he may at his discretion revoke at any time, exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

SCHEDULE - XVII

MANUFACTURE OR MANIPULATION OF CARCINOGENIC DYE TERMEDIATES

(1) Application.—This Schedule shall apply in respect of all factories or any part thereof, where processes in which the substances mentioned in paragraphs 3 and 4 are formed, manufactured, handled or used and the processes incidental thereto in the course of which these substances are formed, are carried on, the processes indicated in this paragraph shall be referred to hereinafter as ―the said processes‖ and such a reference shall mean any or all the processes described in this paragraph.

(2) Definition.—For the purpose of this Schedule the following definitions shall apply, unless the context otherwise requires:

(a) **—controlled substances‖** means chemical substances mentioned in paragraph 4 of this Schedule.

(b) **—first Employment‖** means first employment in the said processes and also re- employment in such processes following any cessation of employment for a continuous period exceeding three calendar months.

(c) **—efficient exhaust draught‖** means localised ventilation effected by mechanical means for the removal of gas, vapour, dust or fume so as to prevent them from escaping into the air of any place in which work is carried on. No draught shall be deemed to be efficient which fails to remove smoke generated at the point where such gas, vapour, fume or dust originates.

(d) **—prohibited Substances‖** means chemical substances mentioned in paragraph 3 of the Schedule.

(3) Prohibited substances.—For the purpose of this Schedule, the following chemical substances shall be classified as **—prohibited substances‖** except when these substances are present or are formed as a by-product of a chemical reaction in a total concentration not exceeding one per cent:

(a) beta-naphthylamine and its salts;

(b) benzidine and its salts;

(c) 4-amino diphenyl and its salts;

(d) 4-nitrodiphenyl and its salts; and

(e) any substance containing any of these compounds.

(4) Controlled substances.—For the purpose of this Schedule, the following chemical substances shall be classified as controlled substances:

(a) alpha-naphthylamine or alpha-naphthylamine containing not more than one per cent of beta-naphthylamine either as a by- product of chemical reaction or otherwise, and its salts;

(b) ortho-tolodine and its salts;

(c) dianisidine and its salts;

(d) dichlorobenzidine and its salts;

(e) auramine; and

(f) Magneta.

(5) Prohibition of employment.—No person shall be employed in the said processes in any factory in which any prohibited substance is formed, manufactured, processed, handled, or used except as exempted by the Chief

Inspector-cum-Facilitator as stipulated in paragraph 23.

(6) Requirements for processing or handling controlled substances.—(a) Wherever any of the controlled substances referred to in paragraph 4 are formed, manufactured, processed, handled, or used, all practical steps shall be taken to prevent inhalation, ingestion or absorption of the said controlled substances by the workers while engaged in processing that substance, and its storage or transport within the plant or in cleaning or maintenance of the concerned equipment, plant, machinery and storage areas.

(b) As far as possible all operations shall be carried out in a totally enclosed system. Wherever such enclosure is not possible, efficient exhaust draught shall be applied at the point where the controlled substance are likely to escape into the atmosphere during the process.

(c) The controlled substances shall be received in the factory in tightly closed containers and shall be kept so except when these substances are in process or in use. The controlled substances shall leave the factory only in tightly closed containers of appropriate type. All the containers shall be plainly labelled to indicate the contents.

(7) Personal protective equipment.—(A) The following items of personal protective equipment shall be provided and issued to every worker employed in the said process:

(a) long trousers and shirts or overalls with full sleaves and head coverings. The shirt or overall shall cover the neck completely.

(b) rubber-gum-boots.

(B) The following items of personal protective equipment shall be provided to everyone separately] for use by workers employed in the said processes when there is danger of injury during the performance of normal duties or in the event of emergency:

(i) Rubber Hand-gloves,

(ii) Rubber aprons, and

(iii) Airline respirators or other suitable respiratory protective equipment.

(C) It shall be the responsibility of the manager to maintain all items of personal protective equipment in a clean and hygienic condition and in good repair.

(8) Prohibition relating to employment of pregnant women and young persons.— No pregnant woman or young person shall be employed or permitted to work in any room in which the said processes are carried on.

(9) Floors of work room.— The floor of every work-room in which the said processes are carried on, shall be;

(a) smooth and impervious to water provided that asphalt or tar shall not be used in the composition of the floor,

(b) maintained in a state of good repair,

(c) with a suitable slope for easy draining and provided with gutters, and

(d) thoroughly washed daily with the drain water being led into a sewer through a closed channel.

(10) Disposal of empty containers.—Empty containers used for holding controlled substances shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded.

(11) Manual handling.—Controlled substances shall not be allowed to be mixed, filled, emptied or handled except by means of a scoop with a handle. Such scoop shall be thoroughly cleaned daily.

(12) Instructions regarding risk.—Every worker on his first employment in the said processes shall be fully instructed on the properties of the toxic chemicals to which he is likely to be exposed to, of the dangers involved and the precaution to be taken. Workers shall also be instructed on the measures to be taken to deal with an emergency.

(13) Cautionary placards.—Cautionary placards in the form specified in Appendix attached to this Schedule and printed in the language of the majority of the workers employed in the said processes, shall be affixed in prominent places frequented by them in the factory, where the placards can be easily and conveniently read. Arrangements shall be made by the manager to instruct periodically all such workers regarding the precautions contained in the cautionary placards.

(14) Medical examination.—(a) Every worker employed in the said processes shall be examined by a Certifying Surgeon within 14 days of his first employment. Such examination shall include tests, which the Certifying Surgeon may consider appropriate and shall include exfoliative cytology of the urine. No workers shall be allowed to work after 14 days of his first employment in the factory unless certified fit for such employment by the Certifying Surgeon.

(b) Every worker employed in the said processes shall be re-examined by a Certifying Surgeon at least once in every six calendar months. Such examination shall include tests which the Certifying Surgeon may consider

appropriate but shall include exfoliative cytology of the urine.

(c) A person medically examined under sub-paragraph (a) shall be granted by the Certifying Surgeon, a certificate of fitness in Form-33 Record of each re-examination carried out under sub-paragraph (6) shall be entered in the certificate. The certificate shall be kept in the custody of the manager of the factory.

(d) The records of each examination carried out as referred to in sub-paragraphs (a) and (b) including the nature and result of the tests, shall be entered by the Certifying Surgeon in a health register in Form-32.

(e) The certificates of fitness and the health register shall be kept readily available for inspection by any Inspector.

(f) If at any time the Certifying Surgeon is of the opinion that a person is no Longer fit for employment in the said processes or in any other work on the ground that his continuance therein would involve damage to his health, he shall make a record of his findings in the said certificate and the health register. The entry of his findings in these documents should also include the period for which he considers that the said person is unfit for working in the said processes] or in any work as the case may be.

(g) No person who has been found unfit to work as said in sub- paragraph (f) shall be re- employed or permitted to work unless the Certifying Surgeon, after further examination again certifies him to be fit for employment.

(15) Medical facilities.—(a) the occupier of every factory in which the said processes are carried on shall engage a qualified medical practitioner for medical surveillance of the workers employed in such processes. His appointment shall be subject to approval of the Chief Inspector-cum-Facilitator.

(b) The occupier shall provide to him all the necessary facilities for the purpose referred to in sub-paragraph (a).

(c) A record of medical examinations and appropriate tests carried out by the qualified medical practitioner shall be maintained.

(16) Obligations of the workers.—It shall be the duty of the persons employed in the said processes to submit themselves for the medical examination including exfoliative cytology of the urine by the Certifying Surgeon or the qualified medical practitioner as provided for under these rules.

(17) Washing and bathing facilities.—(a) The following washing and bathing facilities shall be provided and maintained in a clean state and in good repair

for the use of all workers employed in the said processes:

(i) a wash place under cover having constant supply of water and provided with clean towels, soap, and nail brushes and with at least one stand pipe for every five such workers;

(ii) 50 per cent of the stand pipes provided under clause (i) shall be located in bathrooms where both hot and cold water shall be made available during the working hours of the factory and for one hour thereafter;

(iii) the washing and bathing facilities shall be in close proximity of the area housing the said processes;

(iv) clean towels shall be provided individually to each worker, and

(v) in addition to the taps mentioned under clause (i) one stand pipe, in which warm water is made available, shall be provided on each floor.

(b) Arrangements shall be made to wash factory uniforms and other clothes every day.

(18) Food, drinks etc. prohibited in the work-room.—No worker shall consume food, drinks, pan, supari or tobacco or shall smoke in any work-room in which the said processes are carried on and no worker shall remain in any such room during the intervals for meals or rest.

(19) Cloak room.—There shall be provided and maintained in a clean state and in good repair for the use of the workers employed in the said processes: (a) a cloak- room with lockers having two compartments one for street clothes and the other for work clothes, and (b) a place separate from the locker room and the mess-room, for the storage of protective equipment provided under paragraph (7). The accommodation so provided shall be under the care of a responsible person and shall be kept clean.

(20) Mess room.—There shall be provided and maintained for the use of workers employed in the said processes who remain on the premises during the meal intervals, a mess-room which shall be furnished with tables and benches and provided with suitable means for warming food.

(21) Time allowed for washing.—Before the end of each shift 30 minutes shall be allowed for bathing for each worker who is employed in the said processes. Further, at least 10 minutes shall be allowed for washing before each meal, in addition to the regular time allowed for meals.

(22) Restriction on age of persons employed.—No worker under the age of 40 years shall be engaged in the factory in the said processes for the first time after the date on which the Schedule comes into force.

(23) Exemption.- Prohibited substances.—(a)The Chief Inspector-cum-Facilitator may by a certificate in writing which he may be at his discretion revoke at any time, subject to such conditions, if any, as may specified therein, exempt any process in the course of which any of the prohibited substances is formed, processed, manufactured, handled, or used, from the provisions of paragraph (5) if he is satisfied that the process is carried out in a totally enclosed and hermetically sealed system in such a manner that the prohibited substance is not removed from the system except in quantities not greater than that required for the purpose of control of the process or such purposes as is necessary to ensure that the product is free from any of the prohibited substances.

(b) The Chief Inspector-cum-Facilitator may allow the manufacture, handling or use of benzidine hydrochloride provided that all the processes in connection with it are carried out in a totally enclosed system in such a manner that no prohibited substance other than benzidine hydrochloride is removed therefrom, except in quantities not greater than that required for the purpose of control of the processes or such purposes as is necessary to ensure that the product is free from prohibited substances and that adequate steps are taken to ensure that benzidine hydrochloride, is except while not in a totally enclosed system, kept wet with not less than one part of water to two parts of benzidine hydrochloride at all times.

(24) General exemptions.—If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the processes or for any other reason, all or any of the provisions of this Schedule is not necessary as for the protection of the workers in the factory, the Chief Inspector-cum-Facilitator may by a certificate in writing (which he may in his discretion revoke at any time), exempt such factory from all or any of such provisions subject to such conditions, if any, as he may specify therein.

APPENDIX CAUTIONARY PLA CARD/ NOTICE

1. Dye intermediates which are nitro or amino derivatives or aromatic/hydrocarbons are toxic. You have to handle these chemicals frequently in this factory.
2. Use the various items of protective wear to safeguard your own health.
3. Maintain scrupulous cleanliness at all times. Thoroughly wash hands and feet

before taking meals. It is essential to take a bath before leaving the factory.

4. Wash off any chemical falling on your body with soap and water. If splashed with a solution of the chemical, remove the contaminated clothing immediately. These chemicals are known to produce cyanosis. Contact the medical officer or appointed doctor immediately and get his advice.
5. Handle the dye intermediates only with long handled scoops, never with bare hands.
6. Alcoholic drinks should be avoided as they enhance the risk of poisoning by the chemicals.
7. Keep your food and drinks away from work place. Consuming food, drinks or tobacco in any form, at the place of work is prohibited.
8. Serious effects from work with toxic chemicals, may follow after many years. Great care must be taken to maintain absolute cleanliness of body, clothes machinery and equipment.

SCHEDULE–XVIII

PROCESS OF EXTRACTING OIL SAND FATS FROM VEGETABLES AND ANIMAL SOURCES IN SOLVENT EXTRACTION PLANTS

1. Definitions.— (a) **"Solvent Extraction Plant"** means a plant in which the process of extracting oils and fats from vegetable and animal sources by use of solvents is carried on.

(b) "**Solvent'** means an inflammable liquid such as pentane, hexane and heptane used for the recovery of vegetable oils.

(c) **"Flame proof"** enclosure as applied to electrical machinery or apparatus means an enclosure that will withstand, when covers or other access doors are properly secured, an internal explosion of flammable gas or vapour which may enter or which may originate inside the enclosure without communicating internal inflammation (or explosion) to the external flammable gas or vapour.

(d) **—Competent Person‖** for the purpose of this Schedule shall be at least a Member of the Institution of Engineers (India) or an Associate Member of the said Institution with 10 years experience in a responsible position as may be approved by the Chief Inspector-cum-Facilitator.

Provided that *a Graduate in Mechanical Engineering or Chemical Technology with a specialised knowledge of oils and fats and with a minimum experience of 5 years in a solvent extraction plant shall also be considered to be a competent person:*

Provided further that *the State Government may accept any other qualifications if in its opinion these are equivalent to the qualification aforesaid.*

2. **Location and layout.—**(a) No solvent extraction plant shall be permitted to be constructed or extended within a distance of 30 meters from the nearest residential locality.

(b) A 1.5 meter high continuous wire fencing shall be provided around the solvent extraction plant up to a minimum distance of 15 meters from the plant.

(c) No person shall be allowed to carry any match-box or an open flame or fire inside the area bound by the fencing.

(d) Boiler houses and other buildings where open flame processes are carried on shall be located at least 30 meters away from the solvent extraction plant.

(e) If godowns and preparatory processes are at a distance less than 30 meters from the solvent extraction plant, these shall be at least 15 meters distance from the plant, and a continuous barrier wall of non-combustible material 1.5 meters high shall be erected at a distance of not less than 15 meters from the solvent extraction plant so that it extends to at least 30 meters of vapour travel around its ends from the plant to the possible source of ignition.

3. **Electrical installations.—**(a) All electrical motors and wiring and other electrical equipment installed or housed in solvent extraction plant shall be of flame- proof construction.

(b) All metal parts of the plant and building including various tanks and containers where solvents are stored or are present and all parts of electrical equipment not required to be energised shall be properly bonded together and connected

to earth so as to avoid accidental rise in the electrical potential of such parts above the earth potential.

4. **Restriction on smoking—**Smoking shall be strictly prohibited within 15 meters distance from solvent extraction plant. For this purpose ―No Smoking‖ signs shall be permanently displayed in Hindi and English in the area.

5. **Precautions against friction.—**(a) All tools and equipment including ladders, chains and other lifting tackle required to be used in solvent extraction plant shall be of non-sparking type.

(b) No machinery or equipment in solvent extraction plant shall be belt driven.

(c) No person shall be allowed to enter and work in the solvent extraction Plant if wearing clothes made of nylon or such other fiber that can generate static

electrical charge or wearing footwear which is likely to cause sparks by friction.

6. **Fire-fighting apparatus.—**(a) Adequate number of portable fire extinguishers suitable for use against inflammable liquid fires shall be provided in the solvent extraction plant.

(b) An automatic water spray sprinkler system on a wet pipe or open head deluge system with sufficient supply of storage water shall be provided over solvent extraction plant and through the building housing such plant.

7. **Precautions against power failure.—**Provision shall be made for the automatic cutting off of steam in the event of power failure and also for emergency overhead water supply for feeding water by gravity to condensers which shall come into play automatically with the power failure.

8. **Magnetic separators.—**Oil cake shall be fed to the extractor by a conveyor through a hopper and a magnetic separator shall be provided to remove any piece of iron during its transfer.

9. **Venting.—**(a)Tanks containing solvents shall be protected with emergency venting to relieve excessive internal pressure in the event of fire.

(b) All emergency relief vents shall terminate at least 6 meters above the ground and so located that vapours will not re-enter the building in which solvent extraction plant is located.

10. **Waste water.—**Process waste water shall be passed through a flash evaporator to remove any solvent before it is discharged into sump which should be located within the fenced area, but not closer than 8 meter to the fence.

11. **Ventilation.—**The solvent extraction plant shall be well ventilated and if the plant is housed in a building, the building shall be provided with mechanical ventilation with provision for at least six air changes per hour.

12. **House-keeping.—**(a) Solvents shall not be stored in an area covered by solvent extraction plant except in small quantities, which shall be stored in approved safety cans.

(b) Waste materials such as oily rags, other wastes and absorbents used to wipe off solvent and paints and oils shall be deposited in approved containers and removed from the premises at least once a day.

(c) Space within the solvent extraction plant and within 15 meters from the plant shall be kept free from any combustible materials and any spills of oil or solvent, shall be cleaned up immediately.

13. **Examination and repairs.—**(a) The solvent extraction plant shall be examined by the competent persons to determine any weakness or corrosion and wear once in every 12 months. Report of such examination shall be supplied to the Inspector with his observation as to whether or not the plant is in safe condition to work.

(b) No repairs shall be carried out to the machinery or plant except under the direct supervision of the competent person.

(c) Facility shall be provided for purging the plant with inert gas before opening for cleaning or repairs and before introducing solvent after repairs.

14. **Operating personnel:—**the operation of plant and machinery in the solvent extraction plant shall be in the charge of such duly qualified and trained person as are certified by the competent persons to be fit for the purpose and no other person shall be allowed to operate the plant and machinery.

15. **Employment of pregnant women and young persons:—**No pregnant women or young persons shall be employed in the solvent extraction plant.

16. **Vapour detention:—**A suitable type of flame proof and portable combustible gas indicator shall be provided and maintained in good working order and a schedule of routine sampling of atmosphere at various location as approved by the Chief Inspector-cum- Facilitator shall be drawn out and entered in a register maintained for the purpose.

SCHEDULE XIX

MANUFACTURE OR MANIPULATION OF MANGANESE AND ITS COMPOUNDS

1. **Definition.—**For the purpose of this Schedule, the following definitions shall apply:

(a) **"Manganese Process"** means processing, manufacture or manipulation of manganese or any compound of manganese or any ore or any mixture containing manganese.

(b) **"first employment"** means first employment in any manganese process and includes also re-employment in any manganese process following any cessation in employment for a continuous period exceeding 3 calendar months.

(c) **"Manipulation"** means mixing, blending, filling, emptying, grinding, sieving, drying, packing, sweeping, or otherwise handling of manganese or a compound of manganese or an ore or mixture containing manganese.

(d) **"Efficient exhaust ventilation"** means localised ventilation, effected by

mechanical means for the removal of dust or fume or mist at its source of origin so as to prevent it from escaping into the atmosphere of any place where any work is carried on. No draught shall be deemed to be efficient which fails to remove the dust or fume or mist at the point where it is generated and fails to prevent it from escaping into and spreading into the atmosphere of a work place.

2. **Application.—**This Schedule shall apply to every factory in which or in any part of which any manganese process is carried on.

3. **Exemptions.—**If in respect of any factory, the Chief Inspector-cum-Facilitator is satisfied that owing to any exceptional circumstances, or infrequency of the process, or for any other reason, application of all or any of the provisions of this Schedule is not necessary for the protection of the persons employed in such factory, he may, by an orderin writing which he may at his discretion revoke, exempt such factory from all or any of the provisions on such condition and for such period as he may specify in the said order.

4. **Isolation of a process.—**Every manganese process which may give rise to dust, vapour or mist containing manganese shall be carried on in a totally enclosed system or otherwise effectively isolated from other processes so that other plants and processes and other parts of the factory and persons employed on other work or processes may not be effected by the same.

5. **Ventilation of process.—**No process in which any dust, vapour or mist containing manganese is generated, shall be carried out except under an efficient exhaust ventilation which shall be applied as near to the point of generation as practicable.

6. **Medical Examination.—**(1) Every person employed in a manganese process shall be medically examined by Certifying Surgeon within 14 days of his first employment and thereafter at intervals of not more than three months.

(2) If a person medically examined is found fit for employment on a manganese process the Certifying Surgeon shall grant a Certificate of Fitness in Form-33 which shall be kept in the custody of the manager of the factory. The certificate shall be readily produced by the manager whenever required by an Inspector, and the person granted such a certificate shall be provided with a

token made of metal with the number of the certificate inscribed thereon and the said person shall always carry the said token on his person while at work.

(3) If a person is found unfit for work in any manganese process, the Certifying Surgeon shall grant a certificate to that effect and such person shall not be allowed to work in any manganese process.

(4) If the Certifying Surgeon finds that any worker who had been granted a certificate of fitness at a previous medical examination was no longer fit to be employed on any manganese process, he may revoke the previous certificate and no person whose certificate of fitness has been revoked shall be allowed to work on any manganese process.

The Certifying Surgeon may require such person to be produced before him for fresh medical examination after such period as he may specify in writing on the revoked certificate and in the Health Register.

(5) If the Certifying Surgeon is of the opinion that a person had become permanently unfit for employment on any manganese process he shall make an entry to that effect in the certificate and in the Health Register and no such person shall be allowed to work in any manganese process.

(6) If the Certifying Surgeon is of the opinion that any special expert examination or test is necessary for a proper diagnosis in a doubtful case, he may direct the manager and/or the occupier to get the worker examined by such expert, or to get such tests carried out as may be specified by him and the manager or the occupier as the case may be shall comply with the direction given within a specified time and produce the report of examination or test as the case may be, before the Certifying Surgeon.

(7) If the Certifying Surgeon is of the opinion that any person is not fit for employment in any manganese process but is fit to be employed on any other work he may advise the manager or the occupier to employ the said person on such other job as may be a safe for him. The Certifying Surgeon may also advise the worker to undergo such treatment as he may consider necessary.

(8) If any person has any doubt regarding the diagnosis or decision of the Certifying Surgeon he may make an appeal to the Chief Inspector -cum-Facilitator and the Chief Inspector-cum-Facilitator may refer the case to the Medical Inspector of Factories or to a Medical Committee constituted by him for this purpose of which the Medical Inspector of Factories shall be a member. The decision of the Medical Inspector or the Medical Committee, as the case may be, shall be final in the matter.

7. Personal protective equipment.—(1) The occupier of the factory shall provide and maintain in good and clean condition suitable overalls and head

coverings for all persons employed in any manganese process and such overalls and head coverings shall be worn by the persons while working on a manganese process.

(2) The occupier of the factory shall provide suitable respiratory protective equipment for use by workers in emergency to prevent inhalation of dusts, fumes or mists. Sufficient, number of complete sets of such equipment shall always be kept near the work place and the same shall be properly maintained and kept always in a condition to be used readily.

(3) The occupier shall provide and maintain for the use of all persons employed, suitable accommodation for the storage and make adequate arrangements for cleaning and maintenance of personal protective equipment.

8. Prohibition relating to pregnant women and young persons.—No pregnant woman or young person shall be employed or permitted to work in any manganese process.

9. Food, drinks prohibited in the work-rooms.—No food, drink, pan and supari or tobacco shall be allowed to be brought into or consumed by any worker in any work- room in which any manganese process is carried on.

10. Mess room.—There shall be provided and maintained for the use of the persons employed in a manganese process a suitable mess-room which shall be furnished with sufficient tables and benches and adequate means for warming of food. The mess-room shall be placed under the charge of a responsible person and shall be kept clean.

11. Washing facilities.—There shall be provided and maintained in clean state and in good condition, for the use of persons employed on manganese process a wash place under cover, with either:

(a) a trough with a smooth impervious surface fitted with a waste pipe without plug. The trough shall be of sufficient length to allow at least 60 cms for every such person employed at any one time, and having a constant supply of water from taps or jets above the trough at intervals at not more than 60 cms; or at least one wash basin for every five such persons employed at any one time, fitted with a waste pipe and plug and having a constant supply of water; and

(b) Sufficient supply of soap or other suitable cleaning material and nail brushes and clean towels.

12. Cloak room.—If the Chief Inspector-cum-Facilitator so requires there shall be provided and maintained for the use of persons employed in manganese

process a cloak-room for clothing put off during working hours with adequate arrangement for drying the clothing.

13. **Cautionary placard and instruction.—**Cautionary notices in the following form and printed in Hindi and in the language of the majority of the workers employed shall be affixed in prominent places in the factory where they can be easily and conveniently read by the workers and arrangement shall be made by the occupier to instruct periodically all workers employed in a manganese process regarding the health hazards connected with their duties and the best preventive measures and methods to protect themselves. The notices shall, always be maintained in a legible condition:

CAUTIONARY NOTICE

Manganese and Manganese Compounds:—1. Dust fumes and mists of Manganese and compounds are toxic when inhaled or when ingested.

2. Do not consume food or drink near the work place.
3. Take a good wash before taking meals.
4. Keep the working area clean.
5. Use the protective clothing and equipments provided.
6. When required to work in situations where dusts, fumes or mists are likely to be inhaled, use respiratory protective equipment provided for the purpose.
7. If you get severe headaches, prolonged sleeplessness or abnormal sensations on the body, report to the manager who would make arrangements for your examination and treatment.

SCHEDULE XX

MANUFACTURE AND MANIPULATIONOF DANGEROUSPESTICIDES

1. **Definitions.—**For the purpose of this Schedule, the following definitions shall apply:

(i) **—Dangerous Pesticides‖** means any product proposed or used for controlling, destroying or repelling any pest or for preventing growth or mitigating effects of such growth including any of its formulations which is considered toxic under and is covered by the Insecticides Act, 1968 and the rules made thereunder and any other product, as may be notified from time to time by the State Government.

(ii) **—Manipulation‖** includes mixing, blending, formulating, filling, emptying, packing or otherwise handling.

(iii) **—Efficient exhaust draught‖** means localised mechanical ventilation for removal of smoke, gas, vapour, dust, fume or other mist so as to prevent them from escaping in the air of any work-room in which work is carried on. No exhaust draught shall be considered efficient if it fails to remove smoke generated at the point where such gas, fume, dust, vapour or mist originates from the process.

(iv) **—First employment‖** shall mean first employment in any manufacturing process to which this Schedule applies and shall also include re-employment in said manufacturing process following any cessation of employment for a continuous period exceeding three calendar months.

(v) **—Suspension‖** means suspension from employment in any process where in a dangerous pesticide is manipulated by written certificate in the Health Register in Form-32 signed by the Certifying Surgeon who shall be competent to suspend all persons employed in such process.

2. Application.—This Schedule shall apply in respect of all factories or any plant thereof in which the process of manufacture or manipulation of dangerous pesticides, hereinafter referred to as the said manufacturing process, is carried on.

3. Instruction to workers.—Every worker on his first employment shall be fully instructed on the properties including dangerous properties of the chemicals handled in the said manufacturing process and the hazards involved. The employees shall also be instructed in the measures to be taken to deal with any emergency. Such instructions shall be repeated periodically.

4. Cautionary notice and placards.—Cautionary notices and placards in the form specified in Appendix I of this Schedule and printed in Hindi and in the language of the majority of the workers shall be displayed in all work places in which the said manufacturing process is carried on so that they can be easily and conveniently read by the workers. Arrangements shall be made by the occupier and the manager of the factory to periodically instruct the workers regarding the health hazards arising in the said manufacturing process and methods of protection. Such notices shall include brief instructions regarding the periodical clinical tests required to be undertaken for protecting health of the workers.

5. Prohibition relating to employment of pregnant women or young persons.— No pregnant woman or young person shall be employed or permitted to work in any room in which the said manufacturing process is carried on or in any room in which dangerous pesticides are stored.

6. **Food and drinks, smoking prohibited.**—(i) No food, drink, tobacco, pan and supari shall be brought in or consumed by any worker into any work room in which the said manufacturing process is carried out.

(ii) Smoking shall be prohibited in any work room in which the said manufacturing process is carried out.

7. **Medical examination.**—(i) Every worker employed in the said manufacturing process shall be examined by the Certifying Surgeon within seven days of the first employment and no worker shall be allowed to work unless certified fit for such employment by the Certifying Surgeon.

(ii) Every worker employed in the said manufacturing process shall be re-examined by a Certifying Surgeon at least once in 6 calendar months.

(iii) Due notice shall be given to the Certifying Surgeon and the concerned workers regarding the arrangements for examination of workers employed in the said manufacturing process after obtaining the consent regarding the arrangements from the Certifying Surgeon.

(iv) Health Register in Form-32 containing names of all workers employed in the said manufacturing process shall be maintained.

(v) No worker after suspension shall be employed without written sanction from the Certifying Surgeon entered in or attached to the health register.

8. **Medical facilities.**—(i) The occupier shall engage a qualified medical practitioner approved by the Chief Inspector-cum-Facilitator who shall examine and when necessary treat on the premises of the factory, all workers who are employed in the said manufacturing process for effects of excessive absorption of the dangerous pesticides atleast once a week..

(ii) The occupier shall make necessary arrangements to ensure quick availability of qualified medical practitioners in emergency.

(iii) The occupier shall provide medicines and antidotes and other equipments required for treatment of excessive absorption of dangerous pesticides.

(iv) Records of such examinations and treatments and tests shall be maintained and shall be made available to Inspector-cum-facilitator.

(v) The Chief Inspector-cum-Facilitator may order suitable clinical test or tests to be carried out at specified intervals in respect of workers in any factory where such manufacturing process is carried on. Charges for such test or tests shall be borne by the employer.

(vi) Every worker in any factory where the said manufacturing process is carried on, shall undergo the prescribed examination, tests and treatment.

9. Protective clothing and protective equipment.—(1) Protective clothing consisting of long pants and shirts or overall with long sleeves and head coverings shall be provided for all workers employed in the said manufacturing process.

(2) (a) Protective equipments consisting of rubber gloves, gum boots, rubber aprons, chemical safety goggles and respirators shall be provided for all workers employed in the said manufacturing process.

(b) Gloves, boots, aprons shall be made from synthetic rubber where a pesticide contains oil.

(3) Protective clothing and equipment shall be worn by the workers supplied with such clothing and equipment.

(4) Protective clothing and equipment shall be washed daily from inside and outside if the workers handle pesticides containing nicotine or phosphorus and shall be washed frequently if handling other pesticides.

(5) Protective clothing and equipment shall be maintained in good repair.

10. Floor and work benches.—(1) Floors in every work-room where dangerous pesticides are manipulated shall be of cement or other impervious material giving a smooth surface.

(2) Floors shall be maintained in good repair provided with adequate slope leading to a drain and thoroughly washed once a day with hose pipe.

(3) Work benches where dangerous pesticides are manipulated shall be made of smooth, non-absorbing material preferably stainless steel and shall be cleaned at least once daily.

11. Spillage and waste.—(1) If a dangerous pesticides during its manipulations splashes or spills on the work bench floor or on the protective clothings worn by a worker immediate action shall be taken for thorough decontamination of such areas or articles.

(2) Cloth, rags, paper or other material soaked or soiled with a dangerous pesticide shall be deposited in a suitable receptacle with tight fitting cover. Contaminated waste shall be destroyed by burning at least once a week.

(3) Suitable deactivating agents, where available, shall be kept in readily accessible place for use while attending to a spillage.

(4) Easy means of access shall be provided to all parts of the plant for cleaning, maintenance and repairs.

12. Empty containers used for dangerous pesticides.—Containers used for dangerous pesticides shall be thoroughly cleaned of their contents and treated with an inactivating agent before being discarded or destroyed.

13. Manual handling.—(1)A dangerous pesticides shall not be required or allowed to be manipulated by hand except by means of a long-handled scoop.

(2) Direct contact of any part of the body with a dangerous pesticides during its manipulation shall be avoided.

14. Ventilation.—(1) In every work room or area where a dangerous pesticides is manipulated, adequate ventilation shall be provided at all times by the circulation of fresh air.

(2) Unless the process is completely enclosed the following operations during manipulation of a dangerous pesticides shall not be undertaken without an efficient exhaust draught:

(a) emptying a container holding a dangerous pesticide;

(b) blending a dangerous pesticides;

(c) preparing a liquid or powder formulation containing a dangerous pesticides;

(d) charging or filling a dangerous pesticides into a container tank, hopper or machine orsmall sized containers.

(3) In the event of a failure of the exhaust draught provided in the above operation, the above operations shall be stopped forthwith.

15. Time allowed for washing.—(1) Before each meal and before the end of the day‘s work at least ten minutes in addition to the regular rest interval shall be allowed for washing to each worker engaged in the manipulation of dangerous pesticides.

(2) Every worker engaged in the manipulation of dangerous pesticides shall have a thorough wash before consuming any food and also at the end of the day‘s work.

16. Washing and bathing facilities.—(1) There shall be provided and maintained in clean state and in good repair for the use of all workers employed in the factory where the said manufacturing process is carried on, adequate washing and bathing places having a constant supply of water under cover at the rate of one such places for every 5 persons employed.

(2) The washing places shall have stand pipes placed [1][at a distance] of not less than one meter.

(3) Not less than one-half of the total number of washing places shall be provided with bath-rooms.

(4) Sufficient supply of clean towels made of suitable material shall be provided:

Provided that *such towels shall be supplied individually for each worker if so ordered by the Inspector.*

(5) Sufficient supply of soap and nail brushes shall be provided.

17. Cloak-room.—There shall be provided and maintained for the use of all

workers employed in the factory, where the said manufacturing process is carried on:

(a) A cloak-room for clothing put-off during working hours with adequate arrangements for drying clothing, if wet.

(b) Separate and suitable arrangements for the storage of protective clothing provided under paragraph 9.

18. Mess-room.—There shall be provided and maintained for the use of all workers employed in the factory in which the said manufacturing process is carried on and remaining on the premises during the rest intervals, a suitable mess-room which shall be furnished with:

(a) sufficient tables and benches with back rest; and

(b) adequate means for warming food.

The mess-room shall be placed under the charge of responsible person and shall be clean.

19. Exemption.—If in respect of any factory the Chief Inspector-cum-Facilitator is satisfied that owing to the exceptional circumstances or infrequency of the said manufacturing process or for any other reason which he shall record in writing all or any of the provisions of this Schedule are not necessary for the protection of the workers employed in the factory exempt such factory from all or any of the provisions, on such conditions as he may specify therein. Such certificate may at any time be revoked by the Chief Inspector-cum-Facilitator after recording his reasons thereof.

20. Manipulation not to be under taken.—Manufacture or manipulation of a pesticide shall not be undertaken in any factory unless a certificate regarding its dangerous nature or otherwise is obtained from the Chief Inspector-cum-Facilitator.

APPENDIX I

CAUTIONARY NOTICE (INSECTICIDES ANDPESTICIDES)

See Clause 4

1. Chemicals handled in this plant are poisonous substances.
2. Smoking, eating food or drinking, chewing tobacco in this area is prohibited. No foodstuff or drink shall be brought in this area.
3. Some of these chemicals may be absorbed through skin and may cause poisoning.
4. A good wash shall be taken before meals.
5. A good bath shall be taken at the end of the shift.
6. Protective clothing and equipment supplied shall be used while working in this area.
7. Containers of pesticides shall not be used for keeping foodstuff.
8. Spillage of the chemicals on any part of the body or on the floor or work bench shall be immediately washed with water.
9. Clothing contaminated due to splashing shall be removed immediately.
10 Scrupulous cleanliness shall be maintained in this area.
11. Do not handle pesticides with bare hands, use scoops provided with handle.
12. In the case of sickness like nausea, vomiting, feeling giddiness the manager should be informed who will make necessary arrangements for treatment.
13. All workers shall report for the prescribed medical tests regularly to protect their own health.

SCHEDULE XXI
CARBONDISULPHIDEPLANTS

1. **Application.**–This Schedule shall apply to all electric furnaces in which carbon disulphide is generated and all other plants where carbon disulphide after generation, is condensed, refined and stored.

   These rules are in addition to and not in derogation of any of the provisions or the Act and Rules made thereunder.

2. **Construction-installation and operation.—**(a) The buildings in which electric furnaces are installed and carbon disulphide after generation is condensed and refined shall be segregated from other parts of the factory and shall be of open type to ensure optimum ventilation and the plant lay-out shall be such that only a minimum number of workers are exposed to the risk of any fire or explosion at any one time.

(b) Every electric furnace and every plant in which carbon disulphide is condensed, refined and stored with all their fittings and attachments shall be of good construction, sound material and of adequate strength to sustain the internal pressure to which the furnace or the plant may be subjected and shall be so designed that carbon disulphide liquids and gas are in closed system during their normal working.

(c) The electric furnace supports shall be firmly grouted about a feet in concrete or by other effective means.

(d) Every electric furnace shall be installed and operated according to manufacturers instructions and these instructions shall be clearly imparted to the personnel incharge of construction and operation.

(e) The instructions regarding observance of correct furnace temperature, sulphur dose, admissible current/power consumption and periodical checking of charcoal level shall be strictly complied with.

3. **Electrodes.—**(a) Where upper ring electrode(s), made of steel are used in the electric furnace, they shall be of seamless tube construction and shall have arrangement for being connected to cooling water system through a siphon built in the electrodes or through a positive pressure water-pump.

(b) The arrangements for cooling water referred to in clause (a) shall be connected with automatic alarm system which will actuate in the event of interruption of cooling water in the electrodes and give visible and audible alarm signals in the control room and simultaneously stop the power supply for the furnace

operation and to stop the further supply of water. The alarm system and actuating device shall be checked every day.

4. **Charcoal level indicator and vibrator.**—Means shall be provided on each electric furnace for indicating the correct level of charcoal in the furnace and for vibrating the charcoal. This means shall be employed as often as necessary to maintain correct charge and level of the charcoal.

5. **Charcoal separator**— A cyclone type of charcoal separator shall be fitted on the off take pipe between the electric furnace and sulphur separator to prevent entry of pieces of charcoal into the condensers and piping.

6. **Rupture discs and safety seal.—**(a)At least two rupture discs of adequate size which shall blow off at a pressure twice the maximum operating pressure shall be provided on each furnace and shall either be mounted directly on the top of the furnace or each through an independent pipe as close as possible to the furnace.

(b) A safety water seal shall be provided and tapped from a point between the charcoal separator and the sulphur separator.

7. **Pyrometer and manometers.—**(a) Each electric furnace shall be fitted with adequate number of pyrometers to make a correct assessment of the temperature at various points in the furnace. The dials for reading the temperatures shall be located in the control room.

(b) Manometers shall be provided for indicating pressure:

(i) In the off take pipe before and after the sulphur separator; and

(ii) in primary and secondary condensers.

8. **Check Valves. —**All piping carrying carbon disulphide shall be fitted with check valves at suitable positions so as to prevent gas from flowing back into any electric furnace in the event of its shut down.

9. **Inspection and maintenance of electric furnaces**— (a) Every electric furnace shall be inspected internally by a competent person:

(i) before being placed in service after installation;

(ii) before being placed in service after reconstruction or repairs; and

(iii) periodically every time the furnace is opened for cleaning or de-ashing or for replacing electrodes.

(b) When an electric furnace is shut down for cleaning or de-ashing:

(i) the brick lining shall be checked for continuity and any part found defective removed;

(ii) after removal of any part of the lining, referred to be in (i) the condition

of the shell shall be closely inspected; and

(iii) any plates forming shell found corroded to the extent that safety of the furnace is endangered shall be replaced.

10. **MaintenanceofRecords.**—Thefollowinghourlyrecordsshallbe maintained in a logbook:

(i) Manometer readings at the points specified in 7(b)(i) and (ii).

(ii) Gas temperature indicated by pyrometers and all other vital points near the sulphur separator and primary and secondary condensers.

(iii) Water temperatures and flow of water through the siphon in the Electrodes.

(iv) Primary and secondary voltages and current and energy consumed..

11. **Electrical apparatus, wiring and fittings.**—All buildings in which carbon disulphide is refined or stored shall be provided with electrical apparatus, wiring and fitting which shall afford adequate protection from the fire and explosion.

12. **Prohibition relating to smoking.**—No person shall smoke or carry matches, fire or naked light or other means of producing a naked light or spark in buildings in which carbon disulphide is refined or stored and a notice in Hindi in Davanagri script shall be pasted in the plant prohibiting smoking and carrying of matches, fire or naked light or other means of producing naked light or spark into such rooms.

13. **Means of escape.**—Adequate means of escape shall be provided and maintained to enable persons to move to a safe place as quickly as possible in case of an emergency. At least two independent staircases or ramps of adequate width shall be provided in every building housing the furnaces at the reasonable intervals at opposite ends. These shall always be kept clear of all obstructions and so designed as to afford easy passage.

14. **Warning in case of fire.**—There shall be adequate arrangements for giving warning in case of fire or explosion which shall operate on electricity and in case of failure of electricity by some mechanical means.

15. **Fire-fighting equipment.**—(a) Adequate number of suitable fire extinguishers or other fire-fighting equipment shall be kept in constant readiness for dealing with risks involved and depending upon the amount and nature of materials stored.

(b) Clear instructions as to how the extinguishers or other equipment should be used printed in [Hindi in Devanagri script] shall be affixed to each extinguisher or other equipment and the personnel trained in their use.

16. **Bulk sulphur.**—(a) Open or semi-enclosed spaces for storage of bulk sulphur shall be cited with due regard to the dangers which may arise from sparks given off by nearby locomotives etc., and precautions shall be taken to see that flames, smoking and matches and other sources of ignition do not come in contact with the clouds of dust arising during handling of bulk sulphur.

(b) All enclosures for bulk sulphur shall be of non-combustible construction, adequately ventilated and so designed as to provide a minimum of lodges on which dust may lodge.

(c) The bulk sulphur in the enclosure shall be handled in such a manner as to minimise the formation of dust clouds and no flames, smoking and matches or other sources of ignition shall be employed during handling and non-sparking tools shall be used whenever sulphur is shovelled or otherwise removed by hand.

(d) No repairs involving flames, heat or use of hand or power tools shall be made in the enclosure where bulk sulphur is stored.

17. **Liquid sulphur.**—Open flames, electric sparks and other sources of ignition, including - smoking and matches, shall be excluded from the vicinity of molten sulphur.

18. **Training and supervision.**—(a) All electric furnaces and all plants in which carbon disulphide is condensed, refined or stored shall be under adequate supervision at all times while the furnaces and plant are in operation.

(b) Workers incharge of operation and maintenance of electric furnaces and the plants shall be properly qualified and adequately trained.

19. **Washing facilities.**—The occupier shall provide and maintain in a clean state and good -repair, for the use of all persons employed, wash place under cover with at least one tap or standpipe, having a constant supply of clean water, for every five such persons, the taps or stand-pipes, being paced not less than 120 cms apart with the sufficient supply of soap and clean towels provided that towels shall be supplied individually to each worker.

All the workers employed in the sulphur storage, handling and melting operations shall be provided with a nail brush.

20. **Personal protective equipment.**—(a) Suitable goggles and protective clothing of overalls without pockets, gloves and footwear shall be provided for the use of operatives:

(i) when operating valves or cocks controlling fluids, etc.

(ii) handling charcoal or sulphur.

(b) suitable respiratory protective equipment shall be provided and stored in the appropriate place for use during abnormal conditions or in an emergency.

(c) Arrangements shall be made for the proper and efficient cleaning of all such protective equipment.

21. Cloak-room.—There shall be provided and maintained for the use of all persons employed in the processes a suitable cloak-room for clothing put off during working hours and a suitable place separate from the cloak-room for the storage of overalls or working clothes. The accommodation so provided shall be placed in the charge of a responsible person and shall be kept clean.

22. Unauthorised persons.—Only maintenance and repair personnel, person directly connected with the plant operation and those accompanied by authorised persons shall be admitted into the plant.

SCHEDULE - XXII

PROTECTION AGAINST HAZARDS OF POISONING ARISING FROM BENZENE

1 Application.—This Schedule is made to provide protection against hazards of poisoning from benzene and shall apply in respect of factories or parts thereof in which benzene or substances containing benzene are manufactured, handled or used.

2 Definitions.—For the purpose of this Schedule, the following definitions shall apply:

(a) **—Substances containing benzene‖** means substances wherein benzene content exceed 1 per cent by volume.

(b) **—Substitute‖** means a chemical which is harmless or less harmful than benzene and can be used in place of benzene.

(c) **—Enclosed system‖** means a system which will not allow escape of benzene vapours to the working atmosphere.

(d) **—Efficient exhaust draught‖** means localised ventilation affected by mechanical means for the removal of gases, vapours and dusts or fumes so as to prevent them from escaping into the air of any work-room. No draught shall be deemed to be efficient if it fails to remove smoke generated at the point where such gases, vapours, fumes or dusts originate.

3 Prohibition and substitution.—(a) Benzene or substances containing benzene shall not be used as a solvent or diluent unless the process in which it is used is carried on in an enclosed system or unless the process is carried on in a manner which is considered equally safe as if it is carried out in an enclosed system.

(b) Where suitable substitutes are available, they shall be used instead of benzene or substances containing benzenes. This provision, however, shall not apply to the processes specified in **Appendix ‗A'.**

(c) The Chief Inspector – cum - Facilitator, may subject to confirmation by the State Government, permit exemptions from the percentage laid down in clause 2(a) and also from the provisions of sub-clause (b) temporarily under conditions and within limits of time to be determined after consultation with the employers and workers concerned.

4 Protection against inhalations.—(a)The process involving the use of benzene or substances containing benzene shall as far as practicable be carried out in an enclosed system.

(b) Where, however, it is not practicable to carry out the process in an enclosed system, the workroom in which benzene or substances containing benzene are used, shall be equipped with an efficient exhaust draught or other means for the removal of benzene vapours, to prevent their escape into the air of the workroom so that the concentration of benzene in the air does not exceed 25 parts per million by volume or 80 mg/m^3.

(c) Air analysis for the measurement of concentration of benzene vapours in air shall be carried out every 8 hours or at such intervals as may be directed by the Chief Inspector – cum - Facilitator at places where process involving use of benzene is carried on and the result of such analysis shall be recorded in a register specially maintained for this purpose. If the concentration of benzene vapours in air, as measured by air analysis, exceeds 25 parts per million by volume or 80 mg/m^3, the Manager shall forthwith report the concentration to the Chief Inspector – cum - Facilitator stating the reasons for such increase.

(d) Workers who for special reasons are likely to be exposed to concentration of the work-room exceeding the maximum referred to in clause (b), shall be provided with suitable respirators or face masks. The duration of such exposure shall be limited as far as possible.

5 Measures against skin contact.—(a) Workers who are likely to come in contact with liquid benzene or liquid substances containing benzene shall be provided with suitable gloves, aprons, boots and where necessary vapour tight chemical goggles, made of material not effected by benzene or its vapours.

(c) The protective wears referred to in sub-clause (a) shall be maintained in good condition and inspected regularly.

6 **Prohibition relating to employment of pregnant women and young persons.—** No pregnant woman or young person shall be employed or permitted to work in any work- room involving exposure to benzene or substances containing benzene.

7 **Labelling.—**Every container holding benzene or substances containing benzene shall have the word ―Benzene‖ and approved danger symbols clearly visible on it and shall also display information of benzene content, warning about toxicity and waning about inflammability of the chemical.

8 **Improper use of benzene.—**(a) The use of benzene or substances containing benzene by workers for cleaning their hands or their work clothing shall be prohibited.

(b) Workers shall be instructed on the possible dangers arising from such misuse.

9 **Prohibition of consuming food, etc. in work-room.—**No worker shall be allowed to store or consume food or drink in the work-room in which benzene or substances containing benzene are manufactured, handled or used. Smoking and chewing tobacco or pan shall be prohibited in such work-rooms.

10 **Instruction as regards risks.—**Every worker on his first employment shall be fully instructed on the properties of benzene or substances containing benzene which he has to handle and of the dangers involved. Workers shall also be instructed on the measures to be taken to deal with an emergency.

11 **Cautionary notices.—**Cautionary notices in the form specified in **Appendix B** and presented in Hindi in Devanagri script shall be displayed in prominent places in the work-rooms where benzene or substances containing benzene are manufactured handled or used.

12 **Washing** facilities, **cloak-room and mess-room.—**In factories in which benzene or substances containing benzene are manufactured, handled, or used, the occupier shall provide and maintain in clean state and in good repair:

(a) washing facilities under cover of the standard of at least one tap for every 10 persons having constant supply of water with soap and clean towel provided individually to each worker.

(b) a cloak-room with lockers, for each worker, having two compartments, one for street clothing and one for work-clothing;

(c) a mess-room furnished with tables and benches with means of warming food However, where a canteen or other proper arrangements exist for the workers to take their meals the requirements of mess-room shall be dispensed with.

13 Medical examination.—(a) Every worker who is to be employed in processes involving use of benzene or substances containing benzene, shall undergo:

(i) a thorough pre-employment medical examination including blood test for fitness for employment by a Certifying Surgeon.

(ii) Periodical medical examination including blood test and other biological tests at intervals of every 6 months by the factory medical officer with the assistance of a laboratory.

(b) Certificate of pre-employment medical examination and periodical medical examination including tests shall be entered in a Health Register in Form-32**,** which shall be produced on demand by an Inspector.

(c)If the factory medical officer on examination at any time is of the opinion that any worker had developed signs or symptoms of benzene exposure, he shall make *a* record of his findings in the said register and inform the manager in writing. On receipt of the information from the factory medical officer, the manager of the factory shall send the worker so found exposed, to the Certifying Surgeon who shall after satisfying himself with the findings of the factory medical officer and conducting necessary examination, issue orders of temporary shifting of the worker or suspension of the worker in the process.

(d) The medical examination shall be arranged by the occupier or manager of the factory and the worker so examined shall not bear any expenses for it.

APPENDIX—A

[Clause 3(b)]

PROCESSES TO WHICH THE PROVISION SHALL NOT APPLY REGARDING USE OF SUITABLE SUBSTITUTES IF AVAILABLE, TO BE USED INSTEAD OF BENZENE OR SUBSTANCES CONTAINING BENZENES.

1. Production of benzene.
2. Process where benzene is used for chemical synthesis.
3. Motor spirits (used as fuel).